

06/21/04

SUBJ: INSTRUCTIONS FOR FLIGHT INSPECTION REPORTING

- 1. PURPOSE.** This change transmits revisions to FAA Order 8240.36J, Instructions for Flight Inspection Reporting, dated January 2, 2003.
- 2. DISTRIBUTION.** This change is distributed to the branch level in the Flight Inspection Operations Division in Aviation System Standards, Washington headquarters; the branch level in the regional Airway Facilities Divisions and NAS Implementation Centers; all Flight Inspection Field Offices; and special military addressees.
- 3. CANCELLATIONS.** This change cancels the following Numbered Memorandums
 - a. **AVN-200-03-004**, dated July 3, 2003
 - b. **AVN-200-03-304**, dated April 18, 2003
- 4. EXPLANATION OF CHANGES.** All flight inspection reporting forms have been enabled to print "Date Completed" on the bottom of the form outside the margin, i.e., "Date Completed 02/05/03". Each time the flight inspection form is changed by data entry, the "Date Completed" will be automatically updated.
 - a. **Chapter 2:** References to ASIS changed to AVNIS (Aviation System Standards Information Systems).
 - (1) **Paragraph 12b.** Deleted last sentence of Location field instructions and added new guidance.
 - (2) **Paragraph 12c.** Identifier (Ident) field instructions replaced.
 - (3) **Paragraph 12e.** Radio Frequency Interference (RFI) added as special inspection.
 - (4) **Paragraph 12k.** Includes guidance to add date and printed initials of the second-in-command and any additional electronics technician.
 - (5) **Paragraph 13.** Adds requirement to add date in "Review Initials" block.
 - (6) **Paragraph 16.** Directions for mailing reports and recordings updated.
 - b. **Chapter 3, Paragraph 21 h.** Requirement added to include the city when reporting SIAP information. References to ASIS changed to AVNIS (Aviation System Standards Information Systems).
 - c. **Appendix 1.** FAA Form 8240-4-1 deleted.
 - d. **Appendix 2.** References to ASIS changed to AVNIS (Aviation System Standards Information Systems).
 - e. **Appendix 5.** References to ASIS changed to AVNIS (Aviation System Standards Information Systems).

f. Appendix 6: References to ASIS changed to AVNIS (Aviation System Standards Information Systems).

(1) **Paragraph 1g(2).** Guidance updated to report each channel checked for published and actual angles.

(2) **FAA Form 8240-6** updated to reflect reporting of each channel checked for published and actual angles and "Region" block deleted.

(3) **FAA Form 8240-6-2.** Field 6, Item 6, changed from "B" to "A" Cursor Manual.

g. Appendix 8: References to ASIS changed to AVNIS (Aviation System Standards Information Systems).

(1) **Paragraph 8a(3).** NDB reporting requirements clarified.

(2) **Paragraph 9a.** Guidance replaced.

(3) **Paragraph 9b.** Second sentence deleted.

h. Appendix 10. Appendix removed and reserved.

i. Appendix 11. Parameter guidance clarified.

j. Appendix 12. Paragraph 1d(1) clarified regarding secondary radar features for ASR periodic inspections.

k. Appendix 13. References to ASIS changed to AVNIS (Aviation System Standards Information Systems).

l. Appendix 14:

(1) **Paragraph 5j.** SIAP guidance updated to coordinate with Section 214 of FAA Order 8200.1.

(2) **Paragraph 5l.** Field information clarified. Guidance added for reporting coordinate-based RNAVs procedures, as they are not facilities.

m. Appendix 15. References to ASIS changed to AVNIS (Aviation System Standards Information Systems).

n. Appendix 17: Guidance for completion of and FAA Form 8240-17 replaced.

o. Appendix 23. Paragraph 2c(1). COMNAV AIRLANT address changed.

5 DISPOSAL OF TRANSMITTAL. After filing the revised pages, the change transmittal should be retained.

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/s/

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Program Director of Aviation
System Standards

CHAPTER 1. INTRODUCTION

1. PURPOSE. This order provides policy, guidance, and distribution requirements for flight inspection reports and records.

2. DISTRIBUTION. This order is distributed to the branch level in the Flight Inspection Operations Division in Aviation Systems Standards, Washington headquarters; the branch level in the regional Airway Facilities Divisions and NAS Implementation Centers; all Flight Inspection Offices; and special military addressees.

3. CANCELLATIONS.

a. FAA Order 8240.36H, Instructions for Flight Inspection Reporting, dated July 03, 2000; Change 1 dated June 1, 2001; and Change 2 dated July 2, 2001, are canceled.

b. Numbered Memorandums AVN-200-01-309, dated August 1, 2001; AVN-200-01-311, dated August 9, 2001; AVN-200-01-312, dated September 27, 2001; AVN-200-02-301, dated February 19, 2002; and AVN-200-02-302, dated April 8, 2002; are canceled.

4. EXPLANATION OF CHANGES.

a. Basic Order: References to AMIS changed to Aviation Standards Information System (ASIS) throughout the order.

(1) **Chapter 1, Page 1.** Paragraph 4a. AIRNAV changed to ASIS for clarity.

(2) **Chapter 2, Page 6.** Paragraph 12. Reporting of point in space procedures clarified. AIRNAV changed to ASIS.

(3) **Chapter 2, Page 7.** Paragraph 12e(1)(c) deleted.

(4) **Chapter 2, Page 8.** Paragraph 12g rearranged for clarity.

(5) **Chapter 2, Page 11 (and 12).** Paragraph 16b. Requirements clarified.

(6) **Chapter 3, Page 14.** Paragraph 21e. AIRNAV changed to ASIS. Paragraph 21h. SIAP and obstacle verification information clarified.

(7) **Chapter 3, Page 15.** Paragraph 21i. AIRNAV changed to ASIS.

(8) **Chapter 3, Page 16.** RHO-THETA Magnetic Variation Change Inspection requirements added. Guidance added for completion of an inspection previously reported as incomplete.

b. Appendix 2.

(1) Paragraph c(11). Second sentence changed for clarification.

(2) Paragraph e. First and second sentences changed for clarification. AIRNAV changed to ASIS.

(3) Paragraph f. Requirement added to notify AVN-210 via VN 200 Form 8240-20 of the establishment or cancellation of receiver checkpoints.

c. Appendix 4. FAA Form 8240-4-1 and instructions contained in Paragraph 2 deleted. This form was created for interim use only. Paragraph 1d--third sentence changed for clarification; last sentence deleted.

d. Appendix 5. Paragraphs b and h. AIRNAV changed to ASIS.

e. Appendix 6. FAA Forms 8240-6, Flight Inspection Report -- Precision Approach Radar; FAA Form 8240-6-1, Flight Inspection Report – Precision Approach Radar GPN-22 / TPN-25 Continuation Sheet; and 8240-6-2, Flight Inspection Report - Precision Approach Radar TPN-22 Continuation Sheet, and instructions thereto updated. Reference to AIRNAV in Paragraph 1b changed to ASIS.

f. Appendix 8.

(1) Paragraph 6k. Threshold, antenna (back course), and missed approach reporting of Course Structure clarified.

(2) Paragraphs 8, 9, and 10. References to AIRNAV changed to ASIS.

(3) Paragraph 10f updated (CAT II DH)

(4) Paragraph 10h added for clarity of Clearance Below Path reporting requirements.

(5) Paragraph 10i added – Standard or Expanded Service Volumes

(6) Paragraph 10j added – Roll-Out Procedures

g. Appendix 9. Paragraph d10, Field 4j. Instructions replaced. FAA Form 8240-9 changed.

h. Appendix 13. Location (Field 1) reporting requirements clarified for FAA Form 8240-13. Reference to AIRNAV changed to ASIS.

i. Appendix 15. Paragraph b. Reference to AIRNAV changed to ASIS.

j. Appendix 17.

(1) Paragraph h - GPS/NP deleted from and DP, RNP, SID, and STAR added to listing of RNAV Type in Field 8.

(2) Paragraph o(5) title changed to "Lighting Systems".

(3) Paragraph p, Remarks, clarified.

(4) FAA Form 8240-17 – Field 15 changed to read "Lighting Systems" instead of "Lights".

k. Appendix 19. Instructions for completion of new FAA Form 8240-19, Endfire Glide Slope Transverse Structure Plot, added.

l. Appendix 22.

(1) **Section II, General, paragraph 10.** Clarified requirements to resolve conflict in guidance of Appendix 6 and Appendix 22.

(2) Change required in "Remarks" block to include an example for horizontal and vertical datum. Data elements in Blocks 59, 65, and 66 removed because they are no longer required, but are optional.

(3) Paragraph 35. Added VGSI TCH calculation example.

(4) Block 59. This entry is no longer required but is optional. Paragraph clarifies calculation.

(5) Blocks 65 and 66. Entry of earth curvature in these blocks is no longer required, but is optional.

m. Appendix 23. Address change for Naval Flight Information Group.

5. COMPUTER GENERATED FORMS. This paragraph provides information on the automation of the flight inspection forms.

a. Implementation. The implementation of this system will reduce the errors and tedium of filling in flight inspection forms either by hand or the typewriter. This system also allows information to be extracted from sources such as text files and other databases.

b. Use of Automated Forms. The software package will provide an automated method for completing flight inspection forms. This automated process allows each user to fill in forms completely, accurately, and to print the forms.

c. Equipment Requirements. Each user office must have access to the appropriate hardware/software package. The required software, as well as a user's guide for the current form software package, may be obtained from the Flight Inspection Operations Automation Technology Branch.

d. System Description. This electronic form processor has a visual interface and allows each user to work with forms using windows, pictures, and menus on a screen. The completed screen data and form may be printed on bond paper.

e. Some Features of the System. This program allows the user to:

- (1) Bring a copy of the form into the work area on a screen.
- (2) Tab or select particular fields on the forms with a mouse and type in required data.
- (3) Automatically fill in areas on the form by the computer using many designated fields which contain relatively constant facility data.
- (4) Fill in forms completely and accurately with many automatic checks and entries.
- (5) Fill forms with information from central data-bases.
- (6) Print forms efficiently.

f. Appendix 1, Flight Inspection Forms, contains a listing of forms used in reporting various facilities and types of inspections.

6. DEFINITIONS, ACRONYMS, AND ABBREVIATIONS. (Refer to Order 8200.1, United States Standard Flight Inspection Manual, for definitions, acronyms, and abbreviations.) This order contains instructions and guidance material. Directive verbs are used. In this order, the words:

a. Shall in the second or third person means that an action is mandatory - a "must." "Shall not" means that an action is prohibited.

b. Will indicates it is understood that an action is to be taken. Do not use "will" when you mean "must."

c. Should means that an action is desirable but not mandatory or, "We would like you to do it, but you don't have to."

d. May means an action is permissive - or "If you want to, go ahead."

7. INFORMATION CURRENCY. Any deficiencies found, clarifications needed, or suggested improvements regarding the content of this order should be forwarded to the Flight Inspection Policy and Standards Branch, AVN-230, for consideration. Your assistance is welcome. If an interpretation is urgently needed, you may call AVN-230, FTS 405 954-4526, for guidance, but you should also use FAA Form 1320-19 as a follow-up to verbal conversation.

8. - 10. RESERVED.

CHAPTER 2 - GENERAL INFORMATION

11. GENERAL FORMS COMPLETION.

a. Reports. The flight inspector is responsible for initiating reports for all flight inspections.

b. Reporting Numeric Data. Unless otherwise stated, report numerical data to the following accuracy:

- (1) **Microamperes** - To the nearest whole microampere.
- (2) **Altitude** - To the nearest foot, mean sea level (MSL).
- (3) **Azimuth** - To the nearest tenth of a degree.
- (4) **Percent** - To the nearest tenth of a percent.
- (5) **Mileage** - To the nearest tenth of a nautical mile.
- (6) **Angles** - To the nearest hundredth of a degree.
- (7) **Widths** - To the nearest hundredth of a degree.
- (8) **Latitude** – Degrees, minutes, seconds, and hundredths of a second (north/south).
- (9) **Longitude** – Degrees, minutes, seconds, and hundredths of a second (east/west).

NOTE: In accordance with FAA Order 8200.1, paragraph 302.2b, the following guidelines shall be used in rounding off computations. Measurements and calculations should be carried to one decimal place more than that required for tolerance application. Then apply the following criteria to round off a measurement.

Numerals 1 to 5, round off to zero.

Numerals 6 to 9, round off to the next higher value.

Example: Glidepath Course Width: $0.755^{\circ} = 0.75^{\circ}$
 $0.756^{\circ} = 0.76^{\circ}$

Exception: If a measurement exceeds a tolerance, it shall not be rounded off to an in tolerance condition.

Example: Glidepath Course Width - 0.903° is out of tolerance.

c. Primary and Supplementary Report Forms. The current software for automated form completion shall be used except when plotting azimuth clearance plots or VOR/TACAN orbit plots which may be plotted manually. The forms may be filled out by hand only when an interim report is required. Use a medium point pen with black ink or a typewriter for data entry.

d. Non-Applicable Portions of Report Forms. If any part of a report form does not apply to the facility inspected or the type inspection conducted, leave it blank.

e. Page Numbering. When a report consists of more than one page, number the first page of the report "Page 1 of __ Pages" in the upper right hand margin of the report. Number succeeding pages consecutively. If not preprinted on the report form, write or type page number information in the upper right hand margin of the form e.g., Page ____ of ____.

f. Type Inspection. Except for the special checks which meet periodic requirements, IAW Chapter 3, Paragraph 21o, report only one type of inspection per report form (i.e., if a periodic inspection is conducted on one component of a facility concurrently with a commissioning check of another component of the same facility, submit a separate report on each).

g. Facilities Supporting Other NAVAID's. When a facility's primary purpose is to support a procedure on another NAVAID (e.g., 75 MHz marker beacon, DME, etc.), the supporting facility shall be reported on the "NAVAID's" report form, unless otherwise directed in the appropriate appendix. If the facility component is a compass locator and supports a separate NDB approach procedure, refer to Appendix 5.

h. Surveillance Inspection Discrepancies. Report discrepancies of services and airport conditions on FAA Form 8240-13, Flight Inspection Report--General Characteristics. Report facility discrepancies found during a surveillance inspection on the appropriate facility report form (e.g., ILS, VOR, etc.).

i. Facility Performance. The report shall reflect the facility "as left," unless specified otherwise by reporting instructions for a given facility type.

j. Satisfactory/Unsatisfactory Report Entries. Unless otherwise stated in this order, enter an "S" if satisfactory; enter a "U" if unsatisfactory and refer to Chapter 3, Paragraph 21a.

12. COMMON REPORT DATA. Any additional information or exceptions to the following instructions are specified in the reporting instructions for each type facility. Instructions for reporting common information are as follows:

a. Common Data on Each Report Page. Page Number, Location, Ident, and Date shall be included on all pages of a flight inspection report.

b. Location Field. Facility location information will be obtained from the Aviation System Standards (AVN) Information Systems (AVNIS) Facility Data Sheet. Enter the location and country code for facilities located outside the United States and the location and state code for facilities within the United States (do not enter the airport name for locations within or outside the United States). For shipboard tactical air navigation (TACAN), enter the name of the ship and the hull number (e.g., USS Nimitz - CVN68). For point in space procedures, enter the airport name (if specified), city, and state as identified on the PC form. For routes, leave blank. For a departure procedure (DP) or standard terminal arrival route (STAR), enter the primary airport name.

c. Identifier (Ident) Field. Enter the facility IDENT listed on the AVNIS Facility Data Sheet, except:

(1) If the procedure is to a point in space, not a designated airport, enter the airport identifier assigned by the National Flight Data Center (NFDC). If no ident is assigned, leave blank.

(2) For routes, enter route name, i.e., Q501, etc.

(3) For a DP or STAR, enter the computer code listed on the PC form, i.e., computer code IDALE2.IDALE, enter "IDALE2".

(4) If the facility identifier is changed, refer to Chapter 3, Paragraph 21.

(5) If mobile/ tactical facilities are installed for extended periods of time and utilized for instrument flight rules (IFR), the identification (ID) will be assigned the same as a permanent facility. If the facility is installed in support of a specific temporary (normally not to exceed 90 days) requirement, enter the four-letter ID as indicated in Chapter 3, Paragraph 21m.

d. Date(s) of Inspection Field. Record the UTC date(s) of flight inspection as follows: (1) Inspection started and completed in one day: 2/1/88; (2) Inspection conducted over consecutive days: 1/12-15/89; (3) Inspection conducted over several nonconsecutive days: 8/6, 8, 10/89; and (4) Combined inspections: 10/16, 19-21/89.

e. Type of Inspection Field. Enter an "X" in the block to the left of the word signifying the type of inspection completed.

(1) Identify incomplete or partial inspections by placing one of the following codes in the block preceding the word incomplete:

<u>TYPE INSPECTION</u>	<u>CODE</u>
Incomplete Periodic	P
Incomplete Commissioning	C
Incomplete Site Evaluation	E
Incomplete Special (Scheduled or Unscheduled)	S

(a) All surveillance inspections shall be considered complete.

(b) Shipboard TACAN will always be a complete "Special" inspection reported by placing an "X" in the "Special" block.

(2) For special inspections, place the appropriate code following the word "Special" when the inspection is complete or following the word "Incomplete" when the inspection is incomplete. Available codes are as follows:

After Accident	AA (see note below)
Air Traffic Control and Landing Systems (ATCALS) Evaluation	TE
Antenna Change	AC
Discrepancy Found (During Surveillance Check)	DF
Frequency Change	FX
Memorandum of Agreement	MA
Maintenance Request	MR
Mobile/Tactical Flight Inspection	MT
On Site Request	OSR
Procedures Check	PROC
Reconfiguration	RF
Shipboard TACAN	SBT
User Complaint	UC
Remove and Replace Like Equipment	RR
Radio Frequency Interference	RFI
Other (Explain in Remarks)	OTHER

NOTE: Includes RADAR inspection involving a "near mid-air collision." See Order 8200.1, Section 215.

f. **Common System Field.** This field shall be left blank.

g. **Owner Field.** Enter the owner code listed in AVNIS. Acceptable codes are:

OWNER CODE	DESCRIPTION
A	Air Force
B	Public
C	Coast Guard
E	FAA F&E Projects
F	FAA (Other than F&E)
H	International Public
I	International
J	International Private
K	International Military
L	International (U.S. Aid Funds)
N	Navy
O	Other (Specify in Remarks)
P	Private
R	Army
S	State
X	Special

NOTE: If ownership should change, refer to Chapter 3, Paragraph 21.

(1) **International.** Facilities/approaches/procedures owned by the foreign government shown in the location field.

(2) **Private.** Facilities/approaches/procedures owned by non-governmental interests. This owner is not always indicated in the location field. For commissioning reports only, identify the specific owner (actual corporation or organization) in the "Remarks" section.

(3) **Facilities, approaches, or procedures owned by a domestic governmental interest** other than the Federal Government (such as a state, county, or municipality). For commissioning reports only, identify the specific owner in the "Remarks" section.

(4) **Other.** Facilities owned by the Federal Government other than FAA, such as U. S. Trust Territory, NASA, U. S. State Department. For commissioning reports only, indicate in the "Remarks" section the actual owning interest.

h. **Remarks Field.** See Chapter 3.

i. **Facility/Approach/Procedure Status Field.** The appropriate facility status shall be entered in accordance with Section 107 of Order 8200.1.

j. Region and Flight Inspection Office (FIO) Fields.

(1) **The region designator** shall be the authorized 3-letter code for the FAA region in which the reported facility/approach/procedure is located. For military-owned facilities and foreign governments, leave blank.

(2) **In the FIO field**, enter the assigned 3-letter code of the location of the Pilot-in-Command (PIC) conducting the inspection. If the inspection is done by the Army, enter "Army" in the field. For other non-FAA inspections, enter "Other" and explain in Remarks.

k. Signature Fields. These fields shall contain the printed name and date, in addition to the signature. Reports containing multiple pages of the same form (i.e., VOR report containing multiple copies of FAA Form 8240-2) require signature and date on the first page only. Electronic signatures using an AVN-approved computer program are authorized.

(1) **Flight Inspector's Signature Field.** This field shall contain the signature of the flight inspector in charge of the mission and the printed initials of the second-in-command. When a flight inspection is accomplished over multiple dates, with different flight inspectors in charge, and the data obtained is combined on one report, this field shall contain the signature of the flight inspector in charge during the final date of the check and the printed initials of the second-in-command.

This signature certifies the operational status of the facility and the degree to which the facility supports the approved instrument flight procedure(s) inspected. If only one signature appears on the report, it certifies the completeness and accuracy of all reported data.

(2) **Technician's Signature Field.** This field shall contain the signature of the electronics technician, as well as the printed initials of any additional electronics technician, and certifies the reported technical data is complete, accurate, and conforms to national standards and specifications. The signature of the electronics technician and the printed initials of any additional electronics technician shall be on all flight inspection reports unless his/her participation is not required for the facility certification. In this case, enter "NA" in place of the signature.

l. Aircraft Number. Enter the aircraft registration number (e.g., N99).

13. REPORTS REVIEW. Each Flight Inspection Office (FIO) is responsible for the quality and accuracy of its flight inspection reports. The flight inspection lead (pilot or electronics technician), or an appointed designee, shall review all flight inspection reports and shall initial and date in the upper right hand corner, "Review Initials" block. These initials indicate a quality review was performed on the report.

14. CORRECTED COPIES OF REPORTS. If a report must be changed, the originator shall complete an amended version of the report. Each amended report shall include the number of the amendment (e.g., Amended Report #1: Destroy previous copy dated _____" or Report Amended #2) to identify reports that are amended more than once. If the report has been previously distributed, the annotation "Amended Report: Destroy previous copies dated _____" shall be entered in the top margin of page 1 and the amended report forwarded to the Flight Inspection Technical Support Branch, AVN-210, for redistribution. After accident (AA) reports, if amended, shall have the annotation "Report Amended" (this date shall be the date the report was amended) entered in the top margin of page 1 and the amended report forwarded to the Flight Inspection Technical Support Branch for redistribution. The "AA" report with the latest amendment date is the final report. All after accident reports, including amendments, shall be retained by the Flight Inspection Technical Support Branch. Any reports that cannot be interpreted by AVN-210 will be returned to the originating organization for clarification.

15. SECURITY CLASSIFICATION OF FLIGHT INSPECTION REPORTS.

a. Guidance. The military organization requiring classification of flight inspection reports shall provide classification guidance. The military organization shall be requested to provide this guidance in writing, either by letter or message, and the guidance shall be maintained on file so it can be traced to a classification authority who can justify the initial classification determination (DOD 5200.1-R, Department of Defense Information Security Program Regulation).

b. Classification Markings. Flight inspection reports containing classified information shall be marked in accordance with FAA Order 1600.2, National Security Information, to show: degree of classification; name and routing symbol of the FAA employee applying the classification; authority for classification (reference to the military element's letter or message); safeguarding instructions and/or exemption category; and, if an exemption category is provided, date the report can be declassified (if it can be determined). Specific marking instructions can be obtained from the servicing FAA security office.

c. Control of Reports. Control, handling, storage, and transmission of classified flight inspection reports shall be accomplished in accordance with FAA Order 1600.2.

d. Files. Flight Inspection Offices (FIO's) shall not maintain classified flight inspection facility report files. The Flight Inspection Records Team, AVN-210A, shall contact the Civil Aviation Security Division, AMC-700, and obtain a security control number for all classified reports.

16. DISTRIBUTION OF REPORTS AND RECORDINGS.

a. General. The Flight Inspection Records Team, AVN-210A, shall make the required distribution of all flight inspection reports (except those reports discussed in subparagraph 16c). Flight inspection units shall forward all recordings, worksheets, and flight inspection reports within 60 days after finishing the flight inspection or portions of inspection (progressive periodics, incomplete inspections, etc.).

(1) The cover page of each recording should be annotated with the following information:

- Facility Identification and Type of Facility
- Special Remarks, as appropriate (PA, PMA, POA, etc.)
- Date(s) of Inspection
- Type of Inspection, e.g., Periodic, Special, etc.
- Aircraft Tail Number
- Names of Crew Members

This requirement may be satisfied by securely taping a draft copy of the first page of the flight inspection report to the top of the recordings.

(2) The last page or two of the flight inspection recordings will be folded over in order to close one side with the printed side facing in. Tape the remaining side to close the recording packet. Another acceptable method is to securely tape the recordings (all 4 sides), or for a large stack of recordings, an envelope may be used.

(3) Attach the original flight inspection report (reviewed and signed) to the front of the recording packet with a large paperclip. A data sheet applicable to the inspection should be included with the original report.

(4) All other paperwork and worksheets should be placed inside the folds of the recordings.

(5) All packages must be shipped using boxes or fabric mailers. Padded envelopes must not be used. The U.S. Postal Service provides mailing boxes free of charge. U.S. Postal Form 152 must be used as a mailing label. It will provide tracking and delivery confirmation.

(6) All packages must include a list of contents. As a minimum, include a list of facility IDs, facility type, and the date of the inspection. The Flight Inspection Field Office will retain a copy of the shipment list for their records and send a copy to AVN-210A via E-mail. This notification will be kept in suspense until the package arrives. The shipment notification message should be sent to AVN-210A at the following addresses: j.r.davis@faa.gov and Rhonda.hinch@faa.gov.

(7) Do not send recordings without reports or reports without recordings (as applicable) unless an explanation is attached.

(8) Distribution should be made at least bi-weekly by the U.S. Postal Service. Ship the package to:

FAA/ MMAC/ **AVN-210A**
ARB, Room 117
P.O. Box 25082
Oklahoma City OK 73125

b. After Accident (AA) Reports. After-accident draft reports, including FAA Form 8240-14, Flight Inspection Report – After-Accident Continuation Sheet, shall be forwarded to the Flight Inspection Technical Support Branch, AVN-210, within 3 days of completion of the inspection. The Flight Inspection Technical Support Branch will review the draft and may recommend changes. The final report shall be forwarded to the Flight Inspection Records Team, AVN-210A, within 7 days of completion of the inspection. The Flight Inspection Records Team shall send 2 copies of the entire final AA Report, including FAA Form 8240-14 and 2 copies of the complete preceding periodic flight inspection reports, to the Regional Flight Standards Accident Coordinator/Investigation within 14 days of completion of the inspection. See Appendix 14 for review and completion requirements prior to the above distribution.

c. ILS/MLS Maintenance Alert. Flight Inspection Central Operations shall send one copy of the report to the regional maintenance engineering branch or military command. Enter in Remarks who was notified. Send the original copy to the Flight Inspection Records Team, AVN-210A, to be retained in the official facility file.

d. RNAV/Loran C Report Distribution. Send the original copy to the Flight Inspection Records Team, AVN-210A. Further distribution to be determined. The Flight Inspection Records Team will send a copy of all private special use reports to the Resource Management Staff, AVN-20. They, in turn, will forward a copy to the proponent specified in the reimbursable agreement.

e. All Other Reports. Send the original copy to the Flight Inspection Records Team, AVN-210A.

f. Standard Distribution.

(1) FAA.

(a) Within the contiguous United States:

1 Regional Airway Facilities Office having jurisdiction over the facility inspected - one copy.

2 Airway Facilities Sector having jurisdiction over the facilities inspected - one copy.

(2) Military reports distribution shall be completed as per Appendix 23.

(3) International. Distribute reports to address provided by customer.

(4) General Characteristics Reports.

(a) Send original copy to the Flight Inspection Records Team.

(b) The Flight Inspection Records Team shall send one copy to the appropriate Flight Procedures Branch or military command for local distribution and one copy to the Airport Authority responsible for the service.

17. - 20. RESERVED

CHAPTER 3. REQUIRED REPORT REMARKS

21. REMARKS FIELD. Briefly note any additional information required to indicate ground-based facility performance or space-based procedural inadequacies.

For ground-based facilities, do not go into detail about the adjustments made to obtain final results unless the inspection was made especially to ascertain the effect of the adjustments or facility configurations (e.g., engineering projects).

a. Out-of-Tolerance Conditions.

(1) Describe each out-of-tolerance or unsatisfactory condition found. This is not applicable for ILS/ MLS parameters reported in Fields 8 and 9 of FAA Form 8240-8, Flight Inspection Report--Instrument Landing System or Fields 9, 10, and 11 of FAA Form 8240-16, Flight Inspection Report--Microwave Landing System. Where there are no provisions to identify out-of-tolerance facility/ approach/ procedure performance (e.g., FAA Form 8240-2, Field 8), place an asterisk next to the "as left" condition and enter the out-of-tolerance condition that was found in Remarks.

(2) Indicate whether or not the condition was corrected.

(3) For military facilities, approaches, or procedures, include a statement that military personnel or units were briefed or advised and the date (e.g., tower/maintenance briefed 4/26/89).

b. Facility, Approach, or Procedure Narrative. When narrative references are necessary to describe the facility/ approach/ procedure, they shall be given as direct quotes. For example:

(1) Observation (Permissible)

"The facility structure has deteriorated at 210°. Work was noted on a highway near the facility/ approach/ procedure in that sector."

(2) Unsubstantiated reference (Prohibited).

"The highway construction southwest of the facility/ approach/ procedure is causing deterioration of the course structure."

c. Dash Marks. If a facility parameter/component is not inspected, but should be, place a dash mark in the appropriate space. (Example: When a marker is not checked, place a dash in the facility inspected block, Field 7, FAA Form 8240-8. The dash should not be placed in the facility status block). Explain each dashed item in the Remarks field.

d. Site Evaluation, Commissioning, and Special Flight Inspection Reports. Remarks for these types of inspections shall contain the special flight request number assigned by the FICO and sufficient detail to explain the extent of changes, modifications, and final results so they can be clearly understood by recipients of such reports. Additionally, for a maintenance request or on site request, include the reason for the inspection. Contents of this paragraph do not apply to shipboard TACAN inspections.

e. Notice to Airmen (NOTAM's)/Restrictions. Record NOTAM's/ restrictions issued, revised, or cancelled as a result of the inspection. Enter the NOTAM/ restriction as published (or as recommended for military facilities), the identification of the issuing flight service station (FSS), and the date the NOTAM/ restriction information was forwarded to the FSS or appropriate organization. If the previous flight inspector issued the NOTAM or facility, approach, or procedure restriction remains in effect and is not changed by the present inspection, enter, "NOTAM's (restriction) dated _____ remain in effect," in the Remarks section of NOTAM block. NOTAM's issued, which do not change facility/ approach/ procedure status, need not be entered once the information is included in the DOD Flight Information Publication, United States Government Flight Information Publication or other appropriate publication. (Example: CAT I glide slope does not meet change/reversal tolerances below a point on the glidepath. NOTAM, Ashville Regional, NC: Rwy 16 ILS glide slope unusable for coupled approaches below 2,000 feet MSL). However, the current NOTAM information as issued will be maintained in the AVNIS facility data.

f. Facility Status. If a facility/approach/procedure classification status is changed as a result of the flight inspection, enter appropriate remarks to identify the reason for the change along with a verbatim copy of the published NOTAM (see Paragraph 21e). Include who was notified and when.

g. Approach Lighting System. When commissioning an approach lighting system, either in conjunction with a NAVAID approach or as a separate system, enter the type of lighting system inspected and its status (e.g., ALSF-1, touchdown zone, and centerline lighting checked "satisfactory" or "unsatisfactory") (see Appendix 5, Paragraph j).

h. Standard Instrument Approach Procedures (SIAP's). After checking a SIAP for compliance with Order 8200.1, United States Standard Flight Inspection Manual, Section 214, enter the following remark: "SIAP/ SIAP's verified IAW Order 8200.1, USSFIM, Paragraph 214.3." When the report form provides a dedicated block to indicate the status of a SIAP(s) (i.e., Appendix 17, Field 20), the above remark is not required on existing SIAPs.

If one of the following circumstance(s) is applicable to the inspection of a SIAP(s), report the results of the inspection appropriately: If required, report the SIAP information in the following order: Airport name, city, state, SIAP(s), and amendment number (e.g., Tulsa Intl, Tulsa OK, VOR Rwy 23 Amdt 1).

(1) Periodic Complete. Enter the following remark: "SIAP/ SIAPs verified IAW Order 8200.1, USSFIM, Paragraph 214.3" or enter "X" in dedicated SIAP block(s) when provided (i.e., satisfactory (SAT) or unsatisfactory (UNSAT).

(2) New or amended SIAP(s). Report the SIAP information with the statement "SIAP verified IAW Order 8200.1, USSFIM, Paragraph 214.3."

(3) SIAP(s) not checked. If during a scheduled SIAP evaluation not all the SIAPs are checked, enter an asterisk in the SIAP(s) verified "SAT" block(s). Record the SIAP information with the statement "SIAP not inspected."

(4) SIAP found unsatisfactory. If during a scheduled SIAP evaluation a SIAP(s) is found unsatisfactory, enter an "X" in the SIAP(s) Verified "SAT" block(s) to document the SIAP(s) found satisfactory, then enter an asterisk in the SIAP(s) Verified "UNSAT" block(s). Record the SIAP information for the SIAP(s) found unsatisfactory and describe the unsatisfactory condition in detail.

(5) Obstacle Verification Not Accomplished. If during a periodic inspection the flight inspector cannot ascertain the required obstacle clearance (ROC), enter an asterisk in the SIAP(s) Verified "SAT" block(s). Record the SIAP information with the statement "Obstacle verification not accomplished."

(6) Special to Complete Obstacle Verification. When the obstacle verification inspection is completed, enter an "X" in the appropriate SIAP(s) Verified block(s) (i.e., satisfactory ("SAT") or unsatisfactory ("UNSAT")). Record the SIAP(s) information with the statement, "Obstacle verification accomplished; this completes SIAP(s) inspection for the report dated mm/dd/yy."

(7) More than one SIAP is identified on a single page of the DOD Flight Information Publication or United States Government Flight Information Publication. The SIAP verification, when accomplished, shall be entered on the appropriate form.

(8) After Accident Reports. If the information is contained on the after accident continuation sheet, an entry in this field is not required.

i. AVNIS Facility Data. If the Location, Identifier, Owner, and/or Equipment are changed, show the revised data on the first facility inspection report following the change and remark, e.g., the former identifier was (indicate the identifier formerly shown in Field 2). Flight inspection-initiated changes shall be explained in the Remarks section, if appropriate.

j. Expanded Service Volume (ESV). Whenever the ESV is established or revalidated, define the lower limits of the ESV by facility component, azimuth/bearing (From) or beginning and ending azimuth/bearing if an arc is flown, distance and minimum reception altitude (MRA) (azimuth not required on ILS). There is no requirement to report the upper limit of the ESV, unless interference is reported or suspected, or if requested specifically in FAA Form 6050-4, Expanded Service Volume Request. If requested in FAA Form 6050-4, both upper and lower limits are required for localizers and TLS azimuths. Include appropriate remarks regarding the status of the ESV check (i.e., if unsatisfactory, explain why). Indicate if the ESV check is an original request or a revalidation.

k. 75 MHz Marker Beacons which Support an Instrument Approach Procedure. The operation of 75 MHz markers shall be documented on the report which certifies the primary NAVAID, (e.g., VOR, ILS, NDB).

(1) For commissioning checks of 75 MHz markers, changes of equipment or antennas, enter all checklist items checked and their status (e.g., "satisfactory" or "unsatisfactory"). If dual equipment is installed, document the minor axis width for both transmitters.

(2) For periodic type inspections, enter a statement to indicate the marker was checked satisfactorily (e.g., 75 MHz marker system(s) checked "satisfactory" or "unsatisfactory"). This statement is not required on reports which have 75 MHz fields (e.g., ILS reports).

(3) If any part of the 75 MHz marker system is unsatisfactory, annotate in this field.

l. Weather Broadcast Information. On commissioning reports only, list all weather broadcast capabilities for each facility inspected.

m. Mobile/tactical facilities installed in support of a specific temporary (normally not to exceed 90 days) requirement will use a four-letter ID for reporting. Enter the four-letter ID in the ident field. Enter the transmitted ident, if different, in the Remarks section. The assignment of the four letter ID's is as follows:

The first letter will always be an X

The second and third letters will indicate the region where the temporary facility is located:

AL = Alaskan
CE = Central
CN = Canada
EA = Eastern
EU = Europe
GL = Great Lakes
IN = International (not otherwise coded)
LC = Latin American/Caribbean
NE = New England
NM = Northwest Mountain
PC = Asia/Pacific
SO = Southern
SW = Southwest
WP = Western Pacific

The fourth letter will indicate the owner

A = Air Force
R = Army
N = Navy/Marines
C = Coast Guard

EXAMPLE: XSWA = Mobile deployment of an Air Force asset located in the Southwest Region.

n. Other. Enter all other remarks required by the appendixes in this order.

o. Special Checks Which Meet Periodic Requirements. When a special check meets periodic requirements, enter the remark, "Periodic requirements met." (Updating the periodic inspection following an after-accident inspection has to meet specific conditions—see Appendix 14, Paragraph 2 c). If necessary, identify which transmitter was completed (e.g., xmtr #1—periodic requirements met; xmtr #2—out of service).

p. Critical Area Interference Checks. When a Critical Area Interference Check is accomplished, enter the following, "The FAA does not consider this flight inspection as a valid check of interference caused by aircraft/vehicles in the ILS critical zone."

q. Structure Tolerance (95% Rule). Notify the FICO when structure tolerance (95% rule) is applied to a Category II/III facility. The FICO shall notify the applicable region or military command engineering staff upon initial application of this criteria. Enter in Remarks the FICO was notified. (Ref Order 8200.1, Para 217.41.)

r. RHO-THETA Magnetic Variation Change Inspection. Include remarks detailing the published facility restriction, receiver checkpoint, and ESV radial changes based on the MAGVAR change. For example, a published coverage restriction of 210 - 250° would be changed to 214 - 254° after a MAGVAR change from 2° West to 6° West. Submit the appropriate changes to AVN-210 on VN 200 Form 8240-20.

s. Completion of an Inspection Previously Reported as Incomplete. Enter a statement indicating the check completes the inspection requirements of the report dated mm/dd/yy (e.g., This completes the requirements for the inspection dated 02/11/02).

t. RFI Checks. Enter a narrative description of checks performed and results obtained. Provide physical description and latitude/ longitude of suspected interference source. For incomplete or unsuccessful checks, report bearings obtained, and aircraft location, provide any information that may aid another crew in locating the source.

22.-25. RESERVED.

APPENDIX 1. FLIGHT INSPECTION FORMS

The FAA flight inspection report forms contained in this order are intended to be computer generated. If this process is not available, local reproduction of the forms included in each appendix is authorized.

<u>FAA FORM</u>	<u>DATE</u>	<u>FORMERLY FAA FORM</u>	<u>TITLE</u>
8240-1	3/2000	8240-15	Flight Inspection Report – Continuation Sheet
NOTE: Use this continuation sheet when additional space is required to document facility performance (see Figure 1). Use the same heading information as in the primary report.			
8240-2	3/2001	8240-2	Flight Inspection Report – VOR, VOR/DME, VORTAC, TACAN, VOT
8240-3	3/2000	8240-3	Flight Inspection Report - VOR, VOR/DME, VORTAC, TACAN ORBITAL Worksheet
8240-4	9/2000	8240-4	Flight Inspection Report - VOR, VOR/DME, VORTAC, TACAN ORBITAL Plot
8240-5	3/2000	8240-19	Flight Inspection Report – Non-Directional Beacon, Direction Finding, Visual Aids, Communications
8240-6	1/2003	8240-6	Flight Inspection Report – Precision Approach Radar
8240-6-1	1/2003	8240-6-1	Flight Inspection Report – Precision Approach Radar GPN-22 / TPN-25 Continuation Sheet
8240-6-2	1/2003	8240-6-2	Flight Inspection Report – Precision Approach Radar TPN-22 Continuation Sheet
8240-7	4/2000	8240-21	Flight Inspection Report - ILS Worksheet
8240-7-1	3/2000	8240-21-1	Flight Inspection Report - ILS Continuation Worksheet
8240-8	3/2001	8240-7	Flight Inspection Report – Instrument Landing System
8240-9	1/2003	8240-16	Flight Inspection Report – Instrument Landing System Supplement Sheet
8240-10	3/2000	8240-18-1*	Flight Inspection Report – Azimuth Clearance Plot

* Former FAA Form 8240-18, Flight Inspection Report – Azimuth Clearance Plot, deleted. Former FAA Form 8240-18-1 changed to reflect title of former FAA Form 8240-18 and new number, FAA Form 8240-10.

<u>FAA FORM</u>	<u>DATE</u>	<u>FORMERLY FAA FORM</u>	<u>TITLE</u>
8240-11	3/2000	8240-7-1	Flight Inspection Report – ILS/MLS Maintenance Alert
8240-12	3/2000	8240-8	Flight Inspection Report – Surveillance Radar
8240-12-1	3/2000	8240-9	Flight Inspection Report - Surveillance Radar Coverage Plot
8240-13	3/2000	8240-14	Flight Inspection Report – General Characteristics
8240-14	3/2000	8240-17	Flight Inspection Report – After-Accident Continuation Sheet
8240-15	3/2000	8240-5	Flight Inspection Report – Loran-C
8240-16	3/2001	8240-20	Flight Inspection Report – Microwave Landing System
8240-16-1	4/2000		Flight Inspection Report – MLS Commissioning Data Words
8240-17	1/2003	8240-5-1	Flight Inspection Report - RNAV
8240-18	3/2000	8240-5-2	Flight Inspection Report – GFIS Worksheet
8240-19	1/2003	New Form	Flight Inspection Report - Endfire Glide Slope Transverse Structure Plot
8240-22	4/96	8240-22	Facility Data

FLIGHT INSPECTION FORMS
FIGURE 1. FLIGHT INSPECTION REPORT--CONTINUATION SHEET

PAGE OF PAGES	
FLIGHT INSPECTION REPORT--CONTINUATION SHEET	
1. LOCATION:	REVIEW INITIALS
2. IDENT:	3. FACILITY TYPE:
4. DATE(S) OF INSPECTION:	

**APPENDIX 2. FLIGHT INSPECTION REPORT--VOR, VOR/DME,
VORTAC, TACAN, VOT,
FAA FORM 8240-2**

Record the following:

a. Fields 1--6 - Complete as shown in Chapter 2, Paragraph 12.

b. Field 7 - Facility/Component Inspected. Check the appropriate block(s) to signify all components of the facility being reported. If only the VOR portion of a VORTAC facility has been checked, place an "X" in the VORTAC block and an "X" in the VOR block. For VOR/DME facilities, place an "X" in the VOR/DME block. If only the VOR portion of the VOR/DME has been checked, place an "X" in the VOR/DME block and an "X" in the VOR block. When using the automated form, an entry in the VOT block will change the form to indicate VOT information in Field 10.

c. Field 8 - Radial Data.

(1) Service Designation (Desig). Label each column with the facility designator pertaining to the reported information (e.g., VOR, TAC).

(2) Radial Use. Indicate radial use by an abbreviation (if no procedural use, leave the block blank). Do not use "ESV," as it does not describe procedural use. Other abbreviations may be used if explained in "Remarks" portion of report. When using the automated form, a drop down box is available for radial use selection. Some standard examples are as follows:

ARR	Automated Flight Inspection System (AFIS)
Ref	Reference Radial
V16	Airway
GCP	Ground Receiver Checkpoint
ACP	Airborne Receiver Checkpoint
Apch	Approach
IApch	Initial Approach
MApch	Missed Approach
J180	Jet Route
Dir	Direct Route
RNAV	Area Navigation (RNAV) Procedures
Null	Null Radial
5DEG	Offset (Special Check) of VOR APCH
FEDR	Feeder
INTX	Radial Used to Support a Fix or Intersection
STAR	Standard Terminal Arrival Route
SID	Standard Instrument Departure
DP	Departure Procedure

(3) Azimuth. Enter the magnetic azimuth from the facility (in whole degrees). For RNAV procedures, enter the procedure start/stop azimuth in tenths of degrees (e.g., 120.6 - 060.5). For a VOT, designate azimuth as "360/from."

(4) Transmitter (s). Identify the transmitter checked. If transmitters were alternated during one flight, enter the transmitter "1" or "2" first (whichever had the greatest alignment error), in the "transmitters" block (e.g., 2/1 for TX 2 having the greatest error).

(5) MSL Altitude. Enter the altitude divided by 100 (e.g., "20" for 2,000 feet, "7.2" for 720 feet). If altitude changes occurred, enter the highest and lowest altitudes in the order checked (e.g., 25/20). Leave blank when reporting ground checkpoints.

(6), (7) Distance From/To. Show the starting point (From) and the termination point (To), in nautical miles, of the radial or VOR/DME RNAV procedure being reported.

(8), (9), (10) Roughness and Scalping, Bends, and Polarization. If these parameters are in tolerance, enter the maximum amplitude to the nearest tenth of a degree and indicate the distance from the station (e.g., 2.2/16.0). If these parameters are out-of-tolerance, enter the out-of-tolerance (amplitude/distance) closest to the facility. When reporting radial roughness and/or scalping that exceeds 3.0° but meets operational tolerances because of the distance and altitude criteria, report the worst case of actual roughness and scalping, the mileage where it occurred, and place an asterisk in the reporting block, e.g., *5.0°/25.5. In the Remarks section, place a corresponding asterisk and state "Order 8200.1, paragraph 201.51 or 201.52 applied." If multiple distance segments require separate entries, enter in the remarks section. The reported scalping and roughness is combined. For RNAV procedures, report the azimuth of the maximum roughness and scalping (e.g., 1.5/010).

(11) Alignment Error. Enter the alignment error, as a "+" or "-" value, and the distance from the facility at which it occurs. If automated flight inspection system (AFIS) average alignment is reported, indicate the alignment and distance, to the nearest mile, throughout the entire area that was sampled (e.g., + 0.5/10-65). Enter an "S" for satisfactory or "U" for unsatisfactory when approach alignment evaluations are by visual references to runway thresholds or airport environments. When an RNAV procedure is evaluated using AFIS orbital techniques, enter the average orbit alignment error.

(12) Modulations. Enter "S" for satisfactory or "U" for unsatisfactory. USAF VOR modulation values shall also be entered in Field 11, Remarks.

(13) Transmitter Difference. Enter the difference of course alignment between transmitters, to the nearest tenth of a degree.

(14) Signal Strength. If satisfactory, enter the actual value of the lowest VOR signal strength in microvolts. Signal strength exceeding 300 μ V may be reported as 300+. Report TACAN signal strength as Satisfactory "S" or Unsatisfactory "U". If VOR or TACAN signal strength is unsatisfactory, enter "U" and the closest distance from the facility it occurred, e.g., U/25.

(15) Interference. Enter "S" if no interference noted; enter "U" if interference is noted, and document the area of interference in remarks field.

d. Field 9 - General. If any of these items are inspected, enter an "X" in the appropriate blocks (i.e., satisfactory (SAT) or unsatisfactory (UNSAT)). For voice, enter the feature checked in the drop down box. If more than one feature is checked, note the additional sources in the Remarks section.

e. Field 10 – Reference Radial/Monitor and/or Orbit Data. Complete this field when the reference radial and mean orbital alignment are established/re-established IAW Order 8200.1, Paragraphs 201.3201 and 201.3205. Do not report the reference radial data without the alignment orbit, or vice-versa. This field should also be completed when there is a need to permanently change flight profiles, e.g., direction, distance, and/or altitude. Once references are established, do not report periodic inspection results in this field unless the previously stated requirement(s) are met during the same inspection. Enter the azimuth monitor evaluation results when accomplished. The Aeronautical Information Specialist (AIS) will transfer data from the flight inspection report to the AVNIS data sheet whenever there is an entry/change in any data block within this field, except the "Checkpoint" block. A Field 7 entry of VOT will change this field to indicate VOT data.

(1) Last Date Established. Enter the month, day, and year that the reference radial/mean orbital alignment was established for each facility/component checked. When a commissioning flight check is conducted over multiple dates, do not enter a date until the check is complete. The date entered will be the final date of the inspection. (Example: Dates entered in Field 4 are: 10/18, 11/12-14, 11/21/94; the date to be entered in "Last Date Inspected" is: 11/21/94). To maintain continuity of data, carry forward the information on each succeeding check until the flight check is complete, then include the final date of the inspection. Do not enter a date for monitor checks if it was not accomplished concurrently with the establishment of the reference radial/alignment orbit.

(2) Reference Radial. Enter the azimuth and distance of the reference checkpoint and the altitude flown divided by 100 (e.g., 265.5/18.3/45). For AFIS, enter the azimuth, the segment distance (to the nearest mile), and the altitude flown divided by 100 (e.g., 270/20-15/45). For a VOT, enter the azimuth 360 degrees/from (e.g. 360/from).

(3) Checkpoint. Enter the location where the monitors were evaluated. If evaluated airborne, enter the location as done for the reference radial. If monitors are checked where the reference checkpoint/radial was evaluated, enter "Same." If the monitors are established on the ground, enter the azimuth and distance of the airport location and the term "Gnd" (e.g., 041.1/6.7/Gnd). Describe the airport location in the remarks field (carrying forward the airport location on subsequent reports is optional). For a VOT, enter "VRP" if VOT Reference Point is used for monitor evaluation. If not, enter an * and describe, in remarks, the checkpoint location where the monitor evaluation was accomplished.

(4) Orbit Data. When establishing or reestablishing a mean alignment, enter the direction (CW or CCW), distance (to the nearest mile), and altitude flown divided by 100.

(5) Tx, Alignment, Alarm +, Alarm -. Use the appropriate blocks to report the results of the reference radial/monitors and/or orbit data.

(a) Enter the transmitter evaluated under "TX." If a facility has two transmitters and both are checked, enter the transmitter number as in the example for Dual Transmitter.

(b) Enter the "normal condition" alignment error determined at the reference radial/checkpoint, or ARR if AFIS is used, in the Reference Radial "Alignment Column".

(c) When monitors are checked, enter the amount of shift (+ is clockwise, AFIS code "R"; - is counterclockwise, AFIS code "L") in the Checkpoint "Alarm +" and "Alarm -" columns. The amount of shift shall be referenced to the "normal condition" alignment error measured at the location the monitors are checked. The Checkpoint "Alignment" column shall be left blank. See example.

(d) Enter the mean alignment in the Orbit Data "Alignment" column. See example.

SINGLE TRANSMITTER

	<u>TX</u>	<u>ALIGNMENT</u>	<u>ALARM +</u>	<u>ALARM -</u>
Reference Radial 265.5/18.3/45	1	-0.4		
Checkpoint Same	1		0.9	0.9
Orbit Data CCW/10/45	1	+0.2		

DUAL TRANSMITTER

	<u>TX</u>	<u>ALIGNMENT</u>	<u>ALARM +</u>	<u>ALARM -</u>
Reference Radial 270/20-15/45	1/2	-0.4/-0.5		
Checkpoint 042.0/6.7 nm/GND	1/2		0.9/0.8	0.8/0.7
Orbit Data CCW/10/45	1/2	+0.2/-0.2		

f. **Field 11 - Remarks.** Complete as shown in Chapter 3. Additionally, after commissioning or reestablishing a receiver checkpoint, describe it in this field. Include the airport name and state (if on an airport), altitude at which check is made (airborne checkpoints), azimuth in degrees magnetic, the distance in miles, checkpoint description (e.g., Ground checkpoint: University of IL-Willard, IL, 332°, .9 nm, On runup pad Rwy 14; Airborne checkpoint: 2000', 175°, 8.0 nm, Over grain elevator at Pesotum). Notify the Flight Inspection Technical Support Branch, AVN-210, via VN 200 Form 8240-20 of the establishment or cancellation of receiver checkpoints.

(1) **Radial Alignment.** Report when radial alignment is authorized by the Flight Inspection Technical Support Manager in lieu of an alignment orbit.

(2) **VOT.** When commissioning a VOT, indicate the Identification feature (dots or steady tone).

(3) **USAF VOR's.** For USAF VOR's, enter the modulation values found on at least one radial or arc segment flown during the inspection. These values shall be reported in the following format: modulations/ radial flown or arc/start - stop radials/distance(s) to the nearest mile/MSL altitude divided by 100. Radial example: AM=30.8, FM=16.4, 9960=29.5/312/16-12/37. Orbital example: AM=30.9, FM=15.8, 9960=32.1/312 cw 349/40/25.

(4) **Reference Alignment.** Indicate the date Maintenance was notified of ARR/ orbit reference alignment establishment/ re-establishment, IAW Order 8200.1, Paragraph 201.3205.

g. **NOTAM's.** Complete as shown in Chapter 3, Paragraph 21.

FLIGHT INSPECTION REPORT--VOR, VOR/DME,VORTAC, TACAN, VOT
FIGURE 1. FAA FORM 8240-2

FLIGHT INSPECTION REPORT--VOR,VOR/DME,VORTAC,TACAN, VOT												REVIEW INITIALS							
1. LOCATION:										2. IDENT:									
3. COMMON SYSTEM:				4. DATE(S) OF INSPECTION:						5. OWNER:									
6. TYPE OF INSPECTION				SITE EVALUATION		PERIODIC		SPECIAL											
				COMMISSIONING		SURVEILLANCE		INCOMPLETE											
7. FACILITY / COMPONENT INSPECTED				VOR		VOR / DME		VORTAC		TACAN		VOT		DME					
8. RADIAL DATA																			
SERVICE DESIGNATION																			
RADIAL USE																			
AZIMUTH																			
TRANSMITTER (S)																			
MSL ALTITUDE																			
DISTANCE FROM																			
DISTANCE TO																			
ROUGHNESS/SCALLOPING																			
BENDS																			
POLARIZATION																			
ALIGNMENT ERROR																			
MODULATIONS																			
TRANSMITTER DIFF.																			
SIGNAL STRENGTH																			
INTERFERENCE																			
9. GENERAL		SAT		UNSAT		10. REFERENCE RADIAL/MONITORS AND ORBIT DATA													
STANDBY POWER						LAST DATE ESTABLISHED		VOR:		TACAN:		TX		ALIGN		ALARM +		ALARM -	
VOICE						V		REFERENCE RADIAL:		/ - /									
IDENTIFICATION						O		CHECK POINT:		/ /									
DME ACCURACY						R		ORBIT DATA :		/ /									
DME COVERAGE						T		REFERENCE RADIAL:		/ - /									
SIAP(S) VERIFIED						A		CHECK POINT:		/ /									
						C		ORBIT DATA :		/ /									
11. REMARKS:																			
FACILITY STATUS		NOTAM'S:																	
UNRESTRICTED																			
RESTRICTED																			
UNUSABLE																			
REGION:		FLIGHT INSPECTOR'S SIGNATURE:						TECHNICIAN'S SIGNATURE:						AIRCRAFT NO :					
FIO:																			

FAA FORM 8240 - 2 (3/2001) (FORMFLOW) (Supersedes previous edition)

**APPENDIX 3. FLIGHT INSPECTION REPORT -- VOR, VOR/DME, VORTAC,
TACAN ORBITAL WORKSHEET, FAA FORM 8240-3**

The VOR, VOR/DME, VORTAC, TACAN Orbital Worksheet may be used by field personnel for preparing FAA Form 8240-4, VOR, VOR/DME, VORTAC, TACAN Orbital Plot. The form may be accessed when using the Automated Flight Inspection Form System by selecting FAA Form 8240-4 or FAA Form 8240-3 on the Flight Inspection Form System Main Menu, then selecting Page 2. The worksheet will not be included as part of the report. The data entered into the worksheet may be transferred to the appropriate fields used in the preparation of FAA Form 8240-4.

a. Field 1. Complete as shown in Chapter 2, Paragraph 12.

b. Field 2. Complete as shown in Chapter 2, Paragraph 12..

c. Field 3. AFIS DATA. Enter azimuth errors (+ or -) in the appropriate columns for the portion of orbit accomplished. The errors may be entered every 5 or 10° (option available when selecting automated FAA Form 8240-4 from the Flight Inspection Form System Main Menu). When all orbital data has been entered, the azimuth error data may be transferred to FAA Form 8240-4, Field 4, from FAA Form 8240-3 by selecting the plot option. Additionally, the VOR and TACAN mean alignment and the minimum, maximum errors displayed at the bottom of Field 3 may be transferred to their appropriate locations on FAA Form 8240-4.

[illegible]

**APPENDIX 4. FLIGHT INSPECTION REPORT -- VOR, VOR/DME, VORTAC,
TACAN ORBITAL PLOT, FAA FORM 8240-4;**

This report shall be completed whenever an alignment orbit is required by the VOR or TACAN checklist (see Order 8200.1A, Section 201), or as deemed necessary. When VORTACs with standby equipment are checked, complete a separate form for the standby equipment. Additional forms may be used if needed for clarity; no more than 2 plots per form. This report may be used for coverage orbits if statements in the remarks section of FAA Report Form 8240-2 do not adequately define the areas of coverage. Record the following information:

1. FAA Form 8240-4: Flight Inspection Report -- VOR, VOR/DME, VORTAC, TACAN Orbital Plot

a. VOR, TACAN, DME. Check one or more of the blocks at the right of the title block to show which components are plotted.

b. Fields 1 - 2. Complete as shown in Chapter 2, Paragraph 12.

c. Field 3 - Altitude. If a constant altitude is flown throughout the orbit, enter the altitude divided by 100 in the center of this field. If altitude changes are made during the orbit, mark with a dot the azimuth at which altitude changes occurred (use the azimuth scale at the bottom of Field 4). Enter the altitude divided by 100 between dots of equal altitude.

d. Field 4 - Azimuth Error (+ or -). Plot the course displacement observed during the orbit. Use the plotting codes shown at the top of this field if more than one component or transmitter is plotted. If only one component or transmitter is plotted manually, a solid line may be used. Plot the error every 5.0 or 10.0° and the start/stop points of partial orbits, using the azimuth scale at the bottom for reference. Plot out-of-tolerance areas every 2.0°. Comprehensive alignments, when they are required, shall be plotted each 5.0°.

e. Field 5 - Checkpoint Location. Place a dot at each checkpoint using the azimuth scale in Field 4 or 9 as reference. If a theodolite was used, enter the word "Theodolite" in the center of this Field; if AFIS was used, enter the word "AFIS;" if shipboard, enter radar type if used.

f. Field 6 - DME Distance Unlocks. Enter a horizontal line in the areas where DME "unlock" conditions were observed during the orbit. Use the azimuth scale in Field 4 or 9 as reference.

g. Field 7 - TACAN Azimuth Unlocks. Enter a horizontal line to show the portions of the orbit where a TACAN azimuth "unlock" condition is observed. Use the azimuth scale in Field 4 or 9 as reference.

h. Field 8 - Area of Interference. Enter a horizontal line to indicate the areas where interference is observed, if such interference is considered to have detrimental effect on the usability of the facility. Use the azimuth scale in Field 4 or 9 as reference.

i. Field 9 - Roughness and Scalloping + or -. If roughness and scalloping in excess of $\pm 1.0^\circ$ is observed, plot the amplitude on this graph, using the appropriate plotting codes shown at the top of Field 4. Plot maximum roughness and scalloping in each 10° sector on the 10° increment line. Use the azimuth scale at the bottom for guidance.

j. Field 10 - VOR/TACAN Coverage Signal Strength. Plot VOR signal strength using the plotting codes shown at the top, left side of the field, if the signal strength drops below -93 dbm. For U.S. Navy shipboard TACAN's and other TACAN's or DME's, use the TACAN coverage plotting codes on the right side of this field and plot the TACAN or DME signal strength when the signal strength drops to a level which causes a condition of azimuth or distance unlock. If other plotting techniques are used, explain in Field 11.

k. Field 11 - Remarks. Enter any information that will clarify or be of assistance in interpreting the reported data.

l. Field 12 - Orbital Data. Enter the maximum negative and the maximum positive alignment error (include the sign) plotted on the graph in Field 4, as well as the algebraic difference between the two. Mark the "TX" block for VOR and designate the transmitter number. Mark the "TP" block for TACAN and designate the transponder number. Enter the mean alignment (e.g., +0.2), orbit direction (CW or CCW), and the orbit radius in nautical miles (e.g., 10 nm).

FLIGHT INSPECTION REPORT--VOR, VOR/DME, VORTAC, TACAN ORBITAL PLOT **FIGURE 1. FAA FORM 8240-4**

PAGE OF PAGES

FLIGHT INSPECTION REPORT -- VOR,VOR/DME,VORTAC,TACAN ORBITAL PLOT		VOR TACAN DME																															
1. LOCATION:		IDENT:																															
2. DATE(S) OF INSPECTION:																																	
3. ALTITUDE																																	
4. AZIMUTH ERROR (+ OR -) PLOTTING CODE: VOR #1 _____ VOR #2 - - - - TACAN #1 TACAN #2 - - - - <div style="display: flex; align-items: center;"> <div style="width: 30px; text-align: center;">4 3 2 1 0 1 2 3 4</div> <div style="flex-grow: 1; border: 1px solid black; position: relative;"> <div style="position: absolute; right: 0; top: 50%; transform: translateY(-50%); font-size: 2em;">+</div> <div style="position: absolute; right: 0; bottom: 50%; transform: translateY(50%); font-size: 2em;">-</div> <!-- Grid representation --> </div> </div> <div style="display: flex; justify-content: space-between; font-size: 0.8em; margin-top: 5px;"> AZ: 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 </div>																																	
5. CHECKPOINT LOCATION																																	
6. DME DISTANCE UNLOCK																																	
7. TACAN AZIMUTH UNLOCK																																	
8. AREA OF INTERFERENCE																																	
9. ROUGHNESS & SCALLOPING + / - (Plot if greater than + / - 1.0°)																																	
<div style="display: flex; align-items: center;"> <div style="width: 30px; text-align: center;">3 2 1</div> <div style="flex-grow: 1; border: 1px solid black; position: relative;"> <!-- Grid representation --> </div> </div> <div style="display: flex; justify-content: space-between; font-size: 0.8em; margin-top: 5px;"> AZ: 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 </div>																																	
10. VOR COVERAGE SIGNAL STRENGTH #1 _____ #2 - - - - TACAN COVERAGE SIGNAL STRENGTH #1 #2 - - - -																																	
<div style="display: flex; align-items: center;"> <div style="width: 30px; text-align: center;">dbm -80 -85 -90 -95 -100</div> <div style="flex-grow: 1; border: 1px solid black; position: relative;"> <!-- Grid representation --> </div> </div> <div style="display: flex; justify-content: space-between; font-size: 0.8em; margin-top: 5px;"> AZ: 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 </div>																																	
11. REMARKS:																																	
<table border="1" style="width:100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td rowspan="3" style="width: 10%;">12. ORBITAL DATA</td> <td colspan="4" style="text-align: center;">EQUIPMENT</td> <td style="text-align: center;">-</td> <td style="text-align: center;">+</td> <td style="text-align: center;">SPREAD</td> <td style="text-align: center;">MEAN</td> <td style="text-align: center;">DIR</td> <td style="text-align: center;">RADIUS</td> </tr> <tr> <td style="text-align: center;">TX</td> <td style="text-align: center;">TP</td> <td style="text-align: center;">NO.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">TX</td> <td style="text-align: center;">TP</td> <td style="text-align: center;">NO.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			12. ORBITAL DATA	EQUIPMENT				-	+	SPREAD	MEAN	DIR	RADIUS	TX	TP	NO.								TX	TP	NO.							
12. ORBITAL DATA	EQUIPMENT				-	+	SPREAD	MEAN	DIR	RADIUS																							
	TX	TP		NO.																													
	TX	TP	NO.																														
REGION:		FLIGHT INSPECTOR'S SIGNATURE:																															
FIO:		TECHNICIAN'S SIGNATURE:																															
		AIRCRAFT NO :																															

FAA FORM 8240 - 4 (9/2000) (FORMFLOW) Supersedes previous edition

**APPENDIX 5. FLIGHT INSPECTION REPORT--NONDIRECTIONAL BEACON
DIRECTION FINDING, VISUAL AIDS, COMMUNICATIONS, FAA FORM 8240-5**

This report shall be used to report the results of all commissioning, periodic, special inspections, and after accidents of the aids listed above. Changes to facility status or restrictions for NDB's used only as Compass Locators shall be reported on both an FAA Form 8240-5 and an FAA Form 8240-8. The periodic and special inspections of visual aids or NDB's that support an ILS system shall be reported on FAA Form 8240-8. If the NDB is used as a compass locator for an ILS, and the NDB also supports an NDB approach, two reports are required when the periodic is also conducted on the NDB approach. If the inspection only encompasses the NDB stand-alone approach, only the NDB report is required. All bearings shall be reported as "FROM" the facility, unless there is a specific need to report them as "TO" the facility. Any bearings reported as "TO" the facility shall be clearly indicated.

a. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12, and include the NDB name, in parenthesis, if different than the NDB location name. For charted visuals flight procedures (CVFP's), enter the location listed in the SIAP information.

b. Field 2 - Identifier (Ident). Enter the facility identifier listed on the AVNIS Facility Data Sheet. For visual aids, enter the ICAO airport identifier, followed by the runway number. For CONUS MIRL(s), LIRL(s), HIRL(s), taxi and centerline lights, use the last three characters of the ICAO airport identifier. For International MIRL(s), LIRL(s), HIRL(s), taxi and centerline lights, use the ICAO airport identifier. For CVFP(s), enter the ICAO airport identifier. Multiple procedures to the same airport may be reported on one report form.

c. Field 3 - Common System. Complete as shown in Chapter 2, Paragraph 12.

d. Field 4 - Date/Dates of Inspection. Complete as shown in Chapter 2, Paragraph 12.

e. Field 5 - Owner. Complete as shown in Chapter 2, Paragraph 12.

f. Field 6 - Type of Inspection. Complete as shown in Chapter 2, Paragraph 12.

g. Field 7 - Facility/Component Inspected. Place an "X" in the appropriate block indicating the facility being inspected. For CVFP's, place an "X" in the visual aids block.

h. Field 8 - Nondirectional Beacon.

(1) Radio Class Code. Enter the applicable code as it appears in the FAA AVNIS data unless information is changed by the report. Identify UHF facilities by adding "UHF." If inspecting the DME only of an NDB/DME, leave blank.

(2) Frequency. Enter the published frequency of the NDB.

(3) DME Channel. If an NDB/DME is inspected, enter the published DME channel.

(4) Items Checked. Enter an "X" in the appropriate block to indicate the item inspected did or did not meet prescribed tolerances. The bearing accuracy block may be left blank, except for UHF homing beacons. If voice is inspected on a periodic inspection, mark the appropriate "SAT" or "UNSAT" block. A (SAT) entry indicates all available voice capabilities for the facility (ATIS, AWOS/ASOS, etc.) are satisfactory. If (UNSAT) for one or more voice capabilities, explain in Remarks.

i. **Field 9 - Direction Finding.**

(1) **Checkpoint.** For AFIS, leave blank. For manual, describe checkpoints in Remarks.

(2) **Aircraft Altitude.** Enter the aircraft's altitude over the checkpoint, divided by 100 (e.g., "50" for 5,000 feet).

(3) **Aircraft Distance.** Enter the distance of the aircraft from the antenna to the nearest mile.

(4) **Bearing/Aircraft.** Enter the aircraft's magnetic azimuth, to the nearest degree from the direction finding (DF) antenna, when the DF bearing is given.

(5) **Bearing/DF.** Enter the bearing, to the nearest degree, issued by the controller.

(6) **Bearing/Error.** Enter the difference between the aircraft azimuth and the bearing issued by the controller (e.g., aircraft azimuth 331°, issued bearing 333°, the error is -2.0°).

(7) **Frequency Used.** Enter the frequency used to obtain the DF bearing.

(8) **Station Passage.** Enter an "X" in the appropriate block. If not required, leave blank.

(9) **Standby Power.** Enter an "X" in the appropriate block. If not checked, leave blank.

NOTE: Whenever an alignment orbit is flown (e.g., commissioning check, maintenance request, and as determined by the flight inspector), it may require several pages of DF checkpoints to satisfy the requirements of a complete orbit.

j. **Field 10 - Visual Aids.**

(1) **Facility Inspected.** Check the appropriate block to indicate the facility or facilities inspected. If the visual system inspected is not of the type covered by the four blocks, insert an asterisk after facility inspected and describe in Field 12.

NOTE: More than one type of visual system may be indicated in this field, provided the flight inspector shows clearly which facility each entry refers to and the entries in Fields 1, 2, 4, and 6 are common to each facility. If these provisions cannot be met, complete separate forms.

(2) **Runway(s) Served.** Enter the numerical (and alphabetical when appropriate) designators which have been published to identify the runways served by the system(s) being reported.

(3) **Items Checked.** Enter an "X" in the appropriate block to indicate that an item inspected did or did not meet operational tolerances. Additionally, when visual glide slope indicator (VGSI) facilities are being checked:

(a) When a facility angle is established during installation, utilizing an FAA-approved aiming device, enter the commissioned angle following the "glide slope angle" block (e.g., 3.00°/*). Reference the employment of the aiming device in the "Remarks" block (Field 12). State in "Remarks", "angle determined by maintenance", or

(b) When an angle is determined by flight inspection, enter the commissioned angle and the angle determined during the inspection following the "glide slope angle" block (e.g., 3.00°/2.95°), or

(c) When the commissioned angle is unknown and/or the angle is not determined during the inspection, enter an asterisk following the "glide slope angle" block (e.g., */*) and explain in the "Remarks" field.

k. Field 11 - Communications. Check the appropriate block to indicate the facility being inspected. In cases where Pilot-to-Forecaster or Combined Station Tower were checked, enter P/F or CS/T in the block following "Communications" and enter an "X" in the "other" block. Several frequencies may be listed on one line when the "X's" placed in the blocks on that line are common to all frequencies listed.

l. Field 12 --Remarks. Complete as defined in Chapter 3.

(1) Nondirectional Beacons. When routes are flown, enter the bearing, altitude, and distance flown (e.g., 030/2800/45.0). When the NDB is also used as a compass locator associated with an ILS system, enter the ILS identification on commissioning reports only (e.g., compass locator/LOM/LMM associated with RGR ILS).

(2) Visual Aids. Indicate if the inspection was conducted at night (e.g., "runway end identifier lights (REIL) evaluated at night). Omission of this remark will indicate the check was conducted during the daytime. If the visual aid supports an ILS procedure, enter the ILS identification on commissioning reports only (e.g., approach lighting system (ALS) supports RGR ILS).

m. NOTAM's. Complete as shown in Chapter 3, Paragraph 21e. If the NDB is associated with an ILS, the restrictions shall be added to the ILS AVNIS data sheet.

**FLIGHT INSPECTION REPORT--NDB, DIRECTION FINDING, VISUAL AIDS,
COMMUNICATIONS
FIGURE 1. FAA FORM 8240-5**

FLIGHT INSPECTION REPORT--NONDIRECTIONAL BEACON, DIRECTION FINDING, VISUAL AIDS, COMMUNICATIONS												REVIEW INITIALS	
1. LOCATION:												2. IDENT:	
3. COMMON SYSTEM:				4. DATE/DATES OF INSPECTION:						5. OWNER:			
6. TYPE OF INSPECTION				SITE EVALUATION		PERIODIC		SPECIAL					
				COMMISSIONING		SURVEILLANCE		INCOMPLETE					
7. FACILITY / COMPONENT INSPECTED				DIRECTION FINDING		NDB		NDB / DME		COMMUNICATIONS		VISUAL AIDS	
8. NONDIRECTIONAL BEACON													
RADIO CLASS CODE:				FREQUENCY:				DME CHANNEL:					
ITEMS CHECKED		S A T	UNSAT	ITEMS CHECKED		SAT	UNSAT	ITEMS CHECKED		S A T	UNSAT		
IDENTIFICATION				COVERAGE				STATION PASSAGE					
INTERFERENCE				NEEDLE OSCILLATIONS				STANDBY EQUIPMENT					
VOICE				BEARING ACCURACY				STANDBY POWER					
9. DIRECTION FINDING													
CHECKPOINT	AIRCRAFT ALTITUDE	AIRCRAFT DISTANCE	BEARING			FREQUENCY USED							
			AIRCRAFT	D F	ERROR								
STATION PASSAGE		SATISFACTORY		UNSATISFACTORY		STANDBY POWER		SATISFACTORY		UNSATISFACTORY			
10. VISUAL AIDS													
FACILITY INSPECTED		ALS		REIL		VASI		PAPI		RUNWAY (S) SERVED:			
ITEMS CHECKED		S A T	UNSAT	ITEMS CHECKED		SAT	UNSAT	ITEMS CHECKED		S A T	UNSAT		
INTENSITY				ANGULAR COVERAGE				SEQUENCE FLASHERS					
GLIDE SLOPE ANGLE				OBST. CLEARANCE (VGSi)				FOCUS AND ADJUSTMENTS					
COINCIDENCE (PAR/ILS/MLS)				RUNWAY LIGHTS				RADIO CONTROL SYSTEM					
11. COMMUNICATIONS				APPROACH CONTROL		F S S		TOWER		CENTER		OTHER	
FREQUENCY USED				PRIMARY		SECONDARY		VOICE QUALITY		COVERAGE		STANDBY POWER	
				S A T	UNSAT	S A T	UNSAT	S A T	UNSAT	S A T	UNSAT	S A T	UNSAT
12. REMARKS:													
FACILITY STATUS		NOTAM's:											
UNRESTRICTED													
RESTRICTED													
UNUSABLE													
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO :			
FIO:													

FAA FORM 8240 - 5 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-19)

APPENDIX 6. FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR,
FAA FORM 8240-6;
FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR
GPN-22 / TPN-25 CONTINUATION SHEET, FAA FORM 8240-6-1;
AND FLIGHT INSPECTION REPORT—PRECISION APPROACH RADAR
TPN-22 CONTINUATION SHEET, FAA FORM 8240-6-2

Complete one FAA Form 8240-6, Precision Approach Radar, per runway identifier.

1. FAA FORM 8240-6, FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR.

a. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

b. Field 2 - Identifier (Ident). Enter the ident listed in AVNIS for the specific runway. Report only one runway identifier per report.

c. Field 3 - Runway. Enter the applicable runway designator.

d. Fields 4--6. Complete as shown in Chapter 2, Paragraph 12.

e. Field 7 - Equipment Type Designation. Enter the type of equipment inspected (e.g., MPN-11, GPN-22, or TPN-19).

f. Field 8 - Azimuth Radar. Under the designated channel enter an "X" in the appropriate block to indicate that an item was inspected and that it did or did not meet operational tolerance.

g. Field 9 - Elevation Radar.

(1) Under the designated channel enter an "X" in the appropriate block to indicate that an item was inspected and that it did or did not meet operational tolerance.

(2) Published Angle/Actual Angle. In the "Published Angle" block, enter the commissioned angle for each channel checked. In the "Actual Angle" block, enter the measured PAR angle for each channel checked. If the actual angle is not checked, leave blank.

h. Field 10 - Approaches.

(1) Moving Target Indicator (MTI). Enter "Y" (Yes), "N" (No), or "NA" (Not Applicable) to show if the MTI feature was used during the approach.

(2) Polarization. Indicate the type of polarization used during the approach (e.g., circular polarization (CP) or linear polarization (LP)). For computer-generated radars, enter circular polarization (CP).

(3) Other Approach Conditions. This space is to be utilized to indicate any condition pertinent to the approach (e.g., lower safe limit check, adverse weather conditions).

(4) SAT/UNSAT. Enter an "X" in the appropriate block to show if the approach was satisfactory or unsatisfactory.

i. Field 11 - General.

(1) Item. Enter an "X" in the appropriate block to show what item was inspected and that it did or did not meet operational tolerance.

(2) Frequencies Used. List the frequencies inspected in the appropriate block.

j. Field 12 - Remarks. Complete as defined in Chapter 3. Enter additional remarks, such as:

(1) When PAR equipment has been replaced or when a major modification has been performed.

(2) When azimuth or elevation MTI is required on the final approach. (This requirement does not constitute a facility restriction.)

k. NOTAM's. Complete as shown in Chapter 3, Paragraph 21.

2. FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR CONTINUATION SHEETS. Complete a separate form for each runway inspected.

NOTE: Form abbreviations used in FAA Forms 8240-6-1 and 8240-6-2 are as follow:

FTC	- Fast Time Constant
ACQ	- Acquisition
MTI	- Moving Target Indicator
RWY	- Runway
CK'S	- Checks Required
NOR	- Normal
BK UP	- Back Up
AUTO	- Automatic
COH	- Coherent
NON-COH	- Noncoherent
CFAR	- Constant False Alarm Rate
ALS	- Automatic Landing Subsystem
S/N	- Serial Number
C	- Commissioning
P	- Periodic
RCVR CHAN	- Receiver Channel Number

a. FLIGHT INSPECTION REPORT—PRECISION APPROACH RADAR GPN-22/TPN-25 CONTINUATION SHEET, FAA FORM 8240-6-1.

(1) Field 1 - Location. Enter as in Field 1, FAA Form 8240-6.

(2) Field 2 - Identifier (Ident). Enter as in Field 2, FAA Form 8240-6.

(3) Field 3 – Runway. Enter the applicable runway designator.

(4) Field 4- Date/Dates of Inspection. Enter as in Field 4, FAA Form 8240-6.

(5) Field 5 - Computer Generated Precision Approach Radar Run Configurations.

(a) Asterisks indicate the required configuration for each run.

(b) Enter an "X" in the appropriate blocks to show which configuration was actually checked.

(c) The "Checks Required" columns shows which runs are necessary to satisfy commissioning and periodic requirements.

(d) Enter receiver sensitivity, clutter (rain) reject, etc., in the blocks provided, as required in Order 8200.1, Paragraph 216.31b.

(6) Field 6 - Remarks. Enter comment for each feature which either is not available in the required configuration or produces an unsatisfactory or out-of-tolerance result.

**b. FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR TPN-22
CONTINUATION SHEET, FAA FORM 8240-6-2.**

(1) Field 1 - Location. Enter as in Field 1, FAA Form 8240-6.

(2) Field 2 - Identifier (Ident). Enter as in Field 2, FAA Form 8240-6.

(3) Field 3 - Runway. Enter the applicable runway designator.

(4) Field 4 - Date(s) of Inspection. Enter as in Field 4, FAA Form 8240-6.

(5) Field 5 - System Serial #. Enter the serial number provided by Maintenance.

(6) Field 6 - Computer Generated Precision Approach Radar Run Configurations.

(a) Asterisks indicate the required configuration for each run.

(b) Enter an "X" in the appropriate blocks to show which configuration was actually checked.

(c) The "Checks Required" columns show which runs are necessary to satisfy commissioning and periodic requirements.

(7) Field 7 - Enter program data as required in Order 8200.1, Paragraph 216.31c. Enter transmitter power and receiver sensitivity values provided by Maintenance. Leave polarization blank.

(8) Field 8 - Remarks. Enter comment for each feature which either is not available in the required configuration or produces an unsatisfactory or out-of-tolerance result.

FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR
FIGURE 1. FAA FORM 8240-6

FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR										REVIEW INITIALS	
1. LOCATION:										2. IDENT:	
3. RUNWAY:				4. DATE(S) OF INSPECTION:						5. OWNER:	
6. TYPE OF INSPECTION				SITE EVALUATION		PERIODIC		SPECIAL		INCOMPLETE	
				COMMISSIONING		SURVEILLANCE					
7. EQUIPMENT TYPE DESIGNATION:											
8. AZIMUTH RADAR		CHANNEL "A"		CHANNEL "B"		9. ELEVATION RADAR		CHANNEL "A"		CHANNEL "B"	
		SAT.	UNSAT.	SAT.	UNSAT.			SAT.	UNSAT.	SAT.	UNSAT.
COURSE ALIGNMENT						GLIDE SLOPE ALIGNMENT					
DEVIATION ACCURACY						RANGE ACCURACY					
RANGE ACCURACY						COVERAGE					
COVERAGE / USABLE DIST						PUBLISHED ANGLE					
MTI						ACTUAL ANGLE					
AZIMUTH ONLY MINIMA											
10. APPROACHES											
MTI		POLARIZATION				OTHER APPROACH CONDITIONS				SAT.	UNSAT.
11. GENERAL											
ITEM				SAT.	UNSAT.	FREQUENCIES USED					
CONTROLLER PERFORMANCE						FOUND SATISFACTORY			FOUND UNSATISFACTORY		
ILS / MLS / VGSi COINCIDENCE											
STANDBY EQUIPMENT											
STANDBY POWER											
LIGHTING SYSTEMS											
12. REMARKS:											
FACILITY STATUS		NOTAM's:									
UNRESTRICTED											
RESTRICTED											
UNUSABLE											
FIO:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO:	

FAA FORM 8240 - 6 (07/2004) (FormFlow) (Supersedes previous edition)

Date Completed:

FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR GPN-22 / TPN-25 CONTINUATION SHEET

FIGURE 2. FAA FORM 8240-6-1

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FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR GPN-22/TPN-25 CONTINUATION SHEET											REVIEW INITIALS	
1. LOCATION:											2. IDENT:	
3. RUNWAY:			4. DATE(S) OF INSPECTION:									
5. COMPUTER GENERATED PRECISION APPROACH RADAR RUN CONFIGURATIONS												
RUN	TRACK MODE		FTC		ACQ		MTI		RCVR CHAN	ANGLE	CHECK'S	
	NOR	BK UP	ON	OFF	AUTO	OFF	COH	NON-COH			"C"	"P"
1. "A" CURSOR PRIMARY	*		*		*		*				X	X
2. "A" CURSOR PRIMARY		*		*		*		*			X	
3. "A" CURSOR BACK UP	*		*		*		*				X	
4. "B" CURSOR BACK UP	*		*		*		*				X	X
5. "B" CURSOR PRIMARY	*		*		*		*				X	
* FEATURES REQUIRED												
RECEIVER SENSITIVITY						CLUTTER (RAIN) REJECT						
NOR: _____ NON-COH: _____ COH: _____						YES: _____ NO: _____ N/A: _____						
TRANSMITTER POWER: _____ db						USABLE RANGE ON 20 NM RADAR: _____						
FIRMWARE						DIGITAL MTI BASELINE						
PART #: _____ VERSION#: _____						LIMITING SETTINGS _____						
6. REMARKS:												

FLIGHT INSPECTION REPORT—PRECISION APPROACH RADAR
TPN-22 CONTINUATION SHEET

FIGURE 3. FAA FORM 8240-6-2

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FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR TPN-22 CONTINUATION SHEET										REVIEW INITIALS	
1. LOCATION:										2. IDENT:	
3. RUNWAY:		4. DATE(S) OF INSPECTION:						5. SYSTEM SERIAL #			
6. COMPUTER GENERATED PRECISION APPROACH RADAR RUN CONFIGURATIONS											
RUN	MTI		CFAR		ALS PAR MODE		AZIMUTH 46° SECTOR	USABLE DISTANCE	ANGLE	CHECKS	
	ON	OFF	ON	OFF	AUTO	MANUAL	ON			"C"	"P"
1. "A" CURSOR AUTO		*		*	*		*			X	X
2. "B" CURSOR AUTO		*		*	*		*			X	X
3. "A" CURSOR AUTO	*			*	*		*			X	X
4. "B" CURSOR AUTO	*			*	*		*			X	X
5. "A" CURSOR MANUAL		*	*			*	*			X	
6. "A" CURSOR MANUAL	*		*			*	*			X	
ALTERNATE TOUCHDOWN POINTS ON SAME RUNWAY HEADING											
1. "A" CURSOR AUTO		*		*	*		*			X	X
2. "A" CURSOR MANUAL		*		*	*		*			X	X
3. "B" CURSOR MANUAL		*		*		*	*			X	X
* FEATURES REQUIRED											
7. PROGRAM DATA:											
NAME: _____				PART NUMBER: _____				VERSION: _____			
SERIAL NUMBER: _____				BUILD DATE: _____							
TRANSMITTER OUTPUT POWER: _____				RECEIVER SENSITIVITY: _____				POLARIZATION: _____			
8. REMARKS:											

APPENDIX 7. FLIGHT INSPECTION REPORT -- ILS WORKSHEET, FAA FORM 8240-7
AND ILS CONTINUATION WORKSHEET, FAA FORM 8240-7-1

This form shall be used on all ILS flight inspection evaluations and may be handwritten. It shall be retained with the corresponding recordings. The quantity of information entered on this form is not mandatory but should contain sufficient detail to explain the checks completed and the results found.

1. FAA Form 8240-7, ILS Worksheet.

- a. **Field 1 - Location.** Complete as shown in Chapter 2, Paragraph 12.
- b. **Field 2 - Identification (Ident).** Enter the 3-letter identifier of the ILS facility being inspected.
- c. **Field 3 - Runway No.** Enter the runway designator served by the ILS.
- d. **Field 4 - Date.** Enter the date(s) of the checks.
- e. **Field 5 - Owner.** Complete as shown in Chapter 2, Paragraph 12.
- f. **Field 6 - Type Check.** Complete as shown in Chapter 2, Paragraph 12.
- g. **Field 7 - Facility Inspected.** Place an "X" in the appropriate block(s) to signify components have been inspected.
- h. **Field 8 - Facility Status.** Enter an "X" in the appropriate block for the localizer front course (F/C), glide slope (GS), and localizer back course (B/C) if inspected.
- i. **Field 9. Localizer Data.** Width: Enter commissioned course width; CAT: Enter Category; B: Enter Cat I or Cat II commissioned course width + 17% or CAT III commissioned course width + 10%; S: Enter Cat I or Cat II commissioned course width - 17% or CAT III - 10%; Dual Freq: Enter Yes or No; Dual Tx: Enter Yes or No; Voice: Enter Yes or No; ESV: Enter Yes or No; Back Course: Circle Y or N.
- j. **Field 10. Glide Slope Data.** Angle: Enter commissioned angle; CAT: Enter category of facility; H: Enter high angle limit (+ 10% for CAT I and II, + 4% for CAT III); L: Enter low angle limit (- 7.5% for CAT I and CAT II, - 4% for CAT III); GS Type: Enter glide slope equipment type (null reference, capture effect, etc.); Dual Tx: Enter Yes or No; ESV: Enter Yes or No;
GRD Temp: Enter temperature used when conducting ILS-2 runs; OAT: Enter temperature used when conducting ILS-2 runs; Baro: Enter barometric pressure used when conducting ILS-2 runs;
Alt: Enter MSL altitude ILS-2 runs were flown.
- k. **Field 11. Notes:** Enter any additional information that may be useful in interpreting the results of the flight inspection (e.g., the calibration values, distances, altimeter setting, etc.)

I. **Field 12.** Enter in chronological order the checks conducted and the results. Use enough detail that a qualified person can interpret the information and correlate the data to the flight inspection recordings.

(1) **Run Number (#).** Enter the numerical sequence of each check or test.

(2) **Facility Configuration (CFG).** Enter the number of the transmitter being inspected and the transmitter configuration code as listed below:

<u>Localizer Transmitter Configuration</u>	<u>Code</u>
Normal	N
Special Requirements	Z
Alignment Alarm Left	L
Alignment Alarm Right	R
Course Width Wide	W
Course Width Narrow	S
RF Power Alarm	P
Localizer, CRS Wide, CLR Wide	B
Localizer, CRS NAR, CLR Wide	C
 <u>Glide Slope Transmitter Configuration</u>	 <u>Code</u>
Normal	N
Wide	W
Wide and CLR Demodulation	B
Narrow	S
Dephase Advance	A
Dephase Retard	R
Attenuate Middle Antenna	M
Attenuate Upper Antenna	U
Low Angle Alarm	L
High Angle Alarm	H
RF Power Alarm	P
Special Requirements	Z
Transverse Structure (FAF ALT)	T
Phase Verification Main Sideband Advance Phase	PSA
Phase Verification Main Sideband Retard Phase	PSR
Phase Verification Middle Antenna Advance Phase	PMA
Phase Verification Middle Antenna Retard Phase	PMR

<u>Waveguide Glide Slope Configuration</u>	<u>Code</u>
Main Sideband Advance	MA
Main Sideband Retard	MR
Upper Auxiliary Attenuate	UZ
Upper Auxiliary Advance	UA
Upper Auxiliary Retard	UR
Lower Auxiliary Attenuate	LZ
Upper and Lower Waveguide Advance	ULA
Upper and Lower Waveguide Retard	ULR
Main Waveguide Feed Advance	FA
Main Waveguide Feed Retard	FR
Lower Main Feed Attenuate	LMZ
Upper Main Feed Attenuate	UMZ

(3) The remaining columns are intended for use as designated. They may be altered if necessary.

(4) Remarks/Other Data. When manual mode is used to perform an inspection, enter the word "Non-AFIS" on the line preceding manual inspection entries.

Suggested abbreviations to be used when completing this form:

RWY	- Runway
FREQ	- Frequency
CW	- Commissioned or measured Course Width
CAT	- Category of ILS
CE	- Capture Effect
NR	- Null Reference
SBR	- Sideband Reference
EH	- Endfire Short
ED	- Endfire Standard
EU	- Endfire, Upslope Version
WG	- Waveguide
ANGLE	- Commissioned Glidepath
GND TEMP	- Ground Temperature
OAT	- Outside Air Temperature
BARO	- Barometric Altimeter Setting
ALTITUDE	- Altitude to Fly on ILS-2
PW	- Path Width
PA	- Path Angle
ALN	- Alignment
190uA	- 190 Microamp Angle
Mod	- Modulation
90Hz Sym	- Symmetry of 90 Hertz side of width
SBP	- Structure Below Path

Z1	- Localizer & Glide Slope Structure in Zone 1
Z2	- Localizer & Glide Slope Structure in Zone 2
Z3	- Localizer & Glide Slope Structure in Zone 3
Z4	- Localizer Structure in Zone 4
Z5	- Localizer Structure in Zone 5
POL	- Polarization
150 CLR	- Minimum localizer clearance on 150 Hz side of localizer
90 CLR	- Minimum localizer clearance on 90 Hz side of localizer

2. FAA Form 8240-7-1, ILS Continuation Worksheet.

a. Field 1. Notes. Enter any additional information that may be useful in interpreting the results of the flight inspection.

b. Field 2. Complete as shown in FAA Form 8240-7, Paragraph 1I.

FLIGHT INSPECTION REPORT—ILS WORKSHEET
FIGURE 1. FAA FORM 8240-7

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[illegible]

IDENT:

PAGE ____ of ____ PAGES

[illegible]

**APPENDIX 8. FLIGHT INSPECTION REPORT--INSTRUMENT
LANDING SYSTEM, FAA FORM 8240-8**

FAA Forms 8240-8, Instrument Landing System, and 8240-9, Instrument Landing System Supplement Sheet (see Appendix 9), are designed to be used together to report all the components or conditions of an instrument landing system. This appendix provides guidelines for completing FAA Form 8240-8. For TLS's, separate forms are required for each runway or separate approach procedure.

NOTE: Commissionings of visual aids, NDB's, and after accident reports on NDB's shall be reported on FAA Form 8240-5.

1. **Field 1 - Location.** Complete as shown in Chapter 2, Paragraph 12.
2. **Field 2 - Identification (Ident).** Complete as shown in Chapter 2, Paragraph 12.
3. **Field 3 - Runway No.** Enter runway designator served by the ILS.
4. **Fields 4--6.** Complete as shown in Chapter 2, Paragraph 12.
5. **Field 7 - Facility Inspected.** Place an "X" in the appropriate block(s) to signify components have been inspected. DME refers to any source of DME that may be required for the ILS approach (see Field 11). For TLS facilities, if only part of the system is checked, enter an "X" in the TLS block and in the component checked (e.g., if only the glide slope was checked, place an "X" in the TLS and glide slope blocks. If the whole system is checked, place an "X" in the TLS block only).
6. **Field 8 - Azimuth.** This field shall be left blank when that component of the ILS is not inspected or reported on the same flight inspection form (i.e., do not enter "COM'D WIDTH" or "CATEGORY" for the azimuth if the reported information is glide slope only, or vice versa). Enter the data for both the front and back courses in the appropriate transmitter (TX) column. If an offset facility is checked, enter a statement to this effect in Field 12.
 - a. **Commissioned (Com'd) Width.** Enter the tailored or standard course sector width.
 - b. **Category.** Enter the lowest minima performance category of the facility (I, II, or III).
 - c. **TX1/TX2 OT Column.** Under the appropriate transmitter number, enter an "X" for any out-of-tolerance condition found and not corrected during the inspection; enter a "C" for any out-of-tolerance condition found and corrected during the inspection. Do not enter an "X" or "C" for any out-of-tolerance found in Zone 4 and 5 on a CAT I localizer (Zone 5 for Category II localizer) when the structure is analyzed for the purpose of defining a facility's "Class" of performance.
 - d. **TX1/TX2 Initial Column.** Under the appropriate transmitter number, enter the "as found" operating condition in this column, if this condition was changed or altered during the inspection.
 - e. **TX1/TX2 Final Column.** Under the appropriate transmitter number, enter the operating condition at the completion of the inspection. Use this column to report the results of after accident checks.
 - f. **Course Width.** Enter the measured, normal course sector width for each transmitter checked.
 - g. **Modulation.** Enter the "on course" modulation level in percent for each transmitter checked.
 - h. **Clearance 150.** Enter the minimum value in microamperes and the degrees from the course on the 150 Hz side (front or back) for each transmitter checked. An entry of 180/20 means the minimum clearance was 180 uA at 20 degrees from the course. If clearance values do not meet tolerances in sectors 2 or 3, but are exempted because of duration, see paragraph 10 of this appendix.

NOTE: Do not report the algebraic sign from the AFIS clearance readout.

i. **Clearance 90.** Enter the results found on the 90 Hz side as shown in subparagraph 6h.

j. **Course Structure - General Information.** When a facility is restricted from a point in a zone, enter the maximum course displacement in the unrestricted portion of the zone in Field 8. Also report the maximum structure found within the restricted area in Field 12. When reporting a structure exempted because of duration by Order 8200.1, paragraph 217.41, see paragraph 10 of this appendix.

k. **Course Structure - Z1, Z2, Z3, Z4, Z5.** Report the maximum course displacement in microamperes due to roughness, scalloping, or bends for each transmitter checked. Report the course displacement for each zone and the distance from the threshold, antenna (back course), or missed approach point (e.g., 5/0.7 indicates the displacement was 5 microamperes at 0.7 nautical miles). If distances are referenced to the MAP or antenna (back course), note in Remarks. When necessary to more accurately locate a structure value in a particular zone, report mileage to the nearest hundredth. Zone 4 and 5 structure, which is analyzed for the purpose of defining a facility's "Class" of performance shall be reported. Only the zones used to identify the normal "Category" of the system shall be used to assign facility status. For inspections where Zone 4 and Zone 5 structure are evaluated both through roll-out and airborne (50 ft), report the roll-out results in Field 8 and the airborne results in Remarks.

(1) When zones have tolerances which have linear rates of change, report the structure closest to the tolerance limit.

(2) Report the out of tolerance furthest from the threshold, antenna (back course), or missed approach point. Report additional out-of-tolerance structure closer to the threshold, antenna (back course), or missed approach in Field 12, if appropriate.

(3) Report localizer only approach final segment maximum structure in Field 12. Report the structure closest to the tolerance limit (e.g., localizer only structure 14/0.4 miles).

l. **Vertical Polarization** - Enter the amount of course displacement in microamperes, caused by the vertical polarization and the distance from the threshold or MAP where the check was conducted (e.g., 2/8.0).

m. **Symmetry.** Enter the percent of symmetry of the 90 Hz side.

n. **Alignment.** Enter the course displacement in microamperes, left or right of the designed course (e.g., 3R is three microamperes right of the course, "CL" for no alignment error). For offset facilities, reference the alignment to the designed azimuth alignment. Facilities evaluated without actual course alignment references shall be reported either satisfactory (S) or unsatisfactory (U).

o. **Voice.** Enter "S" if satisfactory or "U" if unsatisfactory.

p. **Identification.** Enter "S" if satisfactory or "U" if unsatisfactory.

q. **Usable Distance.** If a RF power monitor check is conducted to check the service volume, enter the maximum distance in miles from the antenna where the check was satisfactory.

r. **Monitor.** Leave blank.

(1) **Course Width (Narrow).** Enter the course sector width when narrowed to the monitor limit setting. For dual frequency localizers, enter the course narrow/clearance wide results when checked.

(2) **Course Width (Wide).** Enter the course sector width when increased to the monitor limit setting. For dual frequency localizers, report the course wide/clearance wide results.

(3) **Clearance 150.** Enter as shown in subparagraph 6h, the minimum clearance measured on the 150 Hz side, when the facility is in the Wide (1F), or Wide/ Wide (2F) monitor reference setting.

(4) **Clearance 90.** Enter the results found on the 90 Hz side as shown in subparagraph 6r(3).

(5) **Alignment 150.** Enter the course displacement in microamperes, with the course alignment shifted to the right (150 Hz side) monitor limit setting. Reference the displacement to the designed azimuth alignment or modulation balance reference.

(6) **Alignment 90.** Enter the course displacement in microamperes, with the course alignment shifted to the left (90 Hz side) monitor limit setting. Reference the displacement to the designed azimuth alignment or modulation balance reference.

7. Field 9 - Glide Slope. Columns are provided for each transmitter and are labeled similar to the localizer entries. If the glide slope transmitter cannot be determined, indicate in Field 12. This field shall be left blank when that component of the ILS is not inspected or reported on the same flight inspection form.

a. **Commissioned (Com'd) Angle.** Enter the commissioned angle.

b. **Category.** Enter the lowest minima performance category of the glide slope (I, II, or III)

c. **OT Column, Initial Column, Final column.** Complete these columns using the guidelines in paragraphs 6c, d, and e.

d. **Angle.** Enter the measured, actual glidepath angle. If the reported angle is not the actual angle, explain in Field 12.

e. **Modulation.** Enter the modulation level in percent.

f. **Width.** Enter the width of the normal glidepath envelope, as measured on a level run.

g. **Clearance Below Path.** Clearance below path measurements made while the glidepath is in a normal configuration will be reported in these blocks. Enter "S" if satisfactory or "U" if unsatisfactory.

h. **Structure Below Path.** Enter the normal level run angle where 190 microamperes of fly-up signal occurs.

i. **Path Structure - General Information.** If a facility is restricted from a point in a zone, enter the maximum on-path displacement in the unrestricted portion of the zone in Field 9. Also report the maximum structure found within the restricted area in Field 12. When reporting a structure exempted because of duration by Order 8200.1, Paragraph 217.41, see Paragraph 10 of this appendix.

j. **Path Structure Z1, Z2, Z3.** Report the maximum on-path displacement in microamperes due to roughness, scalloping, or bends for each transmitter checked. Report the path displacement for each zone and the distance from the threshold (e.g., 5/0.7 indicates the displacement was 5 microamperes at 0.7 nautical miles). If it is necessary to more accurately identify structure in a particular zone, report mileage to the nearest hundredth.

(1) When zones have tolerances that have linear rates of change, report the structure closest to the tolerance limit.

(2) Report the out of tolerance furthest from the threshold. Report additional out-of-tolerance structure closer to the threshold in Field 12, if appropriate.

k. **Usable Distance.** If a RF power monitor check is conducted to check service volume, enter the maximum distance in miles from the antenna where the check was satisfactory.

l. **Symmetry.** Enter the percent of symmetry of the 90 Hz side.

8. Field 10 - General. This field is used to document the condition of facilities or visual aids, which are part of or used as a component of the ILS approach and are checked concurrently. Additionally, for SIAP(s) checked IAW Order 8200.1, USSFIM, Paragraph 214.31, enter an "X" in the appropriate block (i.e., satisfactory (SAT) or unsatisfactory (UNSAT)).

a. 75 MHz Markers, Compass Locators, DME. Enter "X" in the appropriate column (if inspected).

(1) Satisfactory means that all markers in the system being inspected are in tolerance. If any markers are found out-of-tolerance, and the condition not corrected, indicate markers as "unsatisfactory" and explain in Field 12.

(2) When the DME for an ILS approach is provided by a VOR/DME, VORTAC, or TACAN, enter, following the word "DME", the identifier and the type facility providing the DME (e.g., BLV TAC).

(3) The "compass locators" block is used to report the condition of nondirectional beacon(s) used as a part of an ILS system. If the identifier of the NDB is different from the ILS (compare the broadcast idents, not the AVNIS idents), enter the identifier after the words "compass locators". If more than one NDB is a component of the ILS system, report the additional NDB(s) in the Remarks block.

b. Lighting Systems. If all lighting features required to support the lowest authorized minima are satisfactory, mark accordingly. Other conditions are unsatisfactory.

9. Field 11 - Facility Status. If inspected, enter an "X" in the appropriate block for the localizer front course (F/C), glide slope (G/S), and localizer back course (B/C).

ILS Classification System: The classification system is intended to provide a more comprehensive method of describing ILS performance than the currently used Facility Performance Category alone. A facility's "Class" of performance is defined by using three characters. Flight inspection will report two of the three characters IAW Order 6750.24, Appendix 2. An excerpt from Order 6750.24 is provided as guidance for determining the appropriate character to enter in the ILS Classification System block.

a. I, II, or III: As an example, an ILS that conforms to the ICAO Annex 10 Facility Performance CAT III standards, meets the CAT III localizer course structure criteria to ILS Point "D", and conforms to the integrity and continuity of service objectives of Level 3, would be described as "Class IIID3". An ILS, which conforms to ICAO Annex 10 Facility Performance CAT I standards, has a localizer CAT III course structure to Point "E", and conforms to the integrity and continuity of service objectives of Level 2, would be described as "Class IE2". However, when a CAT I facility performance is monitored to CAT II standards, this same facility having a localizer CAT III course structure to Point "E" and conforming to the integrity and continuity of service objectives to Level 2 would be described as "Class IIE2".

Conversion of a Facility's Performance Class from CAT I to CAT II is dependent upon the facility performance being monitored to CAT II standards. When requested, IAW FAA Order 8400.13, Appendix 2, we are responsible for completing a flight check IAW the AVN-200 checklist contained therein. For our purposes, satisfactory results of all checklist items does not in and of itself constitute a reason to change the Facility's Performance Class from a CAT I to a CAT II within the ILS Classification System block. A change of the Facility's Performance Class will be dependent upon successful completion of all checklists contained in FAA Order 8400.13, Appendix 2, and publication of a "Special Authorization CAT II Operations to RVR 1600 or 1200" SIAP.

For tracking purposes, when the results of all AVN-200 checklist items are satisfactory, enter in Remarks, "This facility supports Facility Performance Class II". Upon publication of the "Special Authorization CAT II Operations to RVR 1600 or 1200" SIAP, the Facility's Performance Class within the "Performance Class" field on the AVNIS Facility Data Sheet will be changed by AVN-210 from CAT I to CAT II. On future reports, when the facility supports CAT II requirements, enter CAT II into the ILS Classification System block.

b. A, B, C, T (Threshold), D, or E: This character defines the ILS point to which the localizer conforms to the Facility Performance CAT III course structure tolerances.

Enter the appropriate ILS Classification System characters in the block. Enter the Facility Performance Class (described in Paragraph 9a above) first, and the point to which the localizer conforms to the Facility Performance CAT III course structure tolerance (described in paragraph 9b above) second. The 2nd character performance classification of "D" and "E" shall be determined solely by rollout procedures. The low approach (50 ft) method may be used for subsequent classification if a comparability check was accomplished, found Satisfactory, and is documented on the AVNIS.

c. NOTAM(s). Complete NOTAM(s) block as directed in Chapter 3, Paragraph 21. Restriction information on NDB's used only as Compass Locators shall be reported in this manner, as well as on FAA Form 8240-5. This restriction status shall be entered in the Remarks section of the ILS AVNIS Facility Data Sheet.

10. Field 12 - Remarks. If FAA Form 8240-9, Flight Inspection Report--Instrument Landing System Supplement Sheet, is used as part of the ILS report, all remarks may be reported on the supplemental sheet.

a. Other Structure Results. Where structure does not meet tolerances but is exempted by Order 8200.1, Paragraph 217.41, place an asterisk in the "OT" column next to the microampere value and explain in Field 12 (e.g., * structure "SAT" per Order 8200.1, Paragraph 217.41).

b. Exempted Clearance. Where clearance values do not meet tolerances in sectors 2 and 3 but are exempted by the provisions of Order 8200.1, paragraph 217.43, place an asterisk in the "OT" column next to the clearance value and explain in Field 12 (e.g., * clearance "SAT" per Order 8200.1, Paragraph 217.43).

c. 75 MHz Marker Beacon(s). See Chapter 3, Paragraph 21.

d. Order 8240.47 Use. When Order 8240.47, Determination of ILS Glidepath Angle, Reference Datum Heights, and Ground Point of Intercept, is used on a glide slope, enter in Field 12 (e.g., Established in accordance with Order 8240.47. RDH = 50.5 feet; ARDH = 51.2 feet; GPI = 952.6 feet; Final Aiming Point Elevation = 1,250.4 feet.) Include this information in the Remarks Field in the AVNIS Facility Data Sheet.

e. Glide Slope Coordinate Standardization (AFIS/ AVNIS). Document the glide slope aiming point coordinates (i.e., centerline abeam and offsets) used when applying FAA Order 8240.47, or anytime the glide slope aiming point coordinates are changed thereafter. Include this information in the Remarks Field of AVNIS, e.g., offset = 450L).

f. CAT II/ III Radio Altimeter. On commissioning, report the radio altimeter indication at the published CAT II Decision Height.

g. Transponder Landing System. Report results of clearance checks. Indicate "SAT" for Satisfactory or "UNSAT" for Unsatisfactory. Explain unsatisfactory conditions. Clearance plots are not required.

h. Clearance Below Path. When checking clearances to runway threshold on CAT I glide slopes with runway centerline localizers, explain in Field 12 (e.g., Clearance below path checked to Category II standards; results between Point C and Threshold are Satisfactory/Unsatisfactory).

i. Standard or Expanded Service Volumes. When establishing or revalidating a standard or expanded service volume on a Localizer, Localizer Directional Aid (LDA), Simplified Directional Facility, or Glide Slope, request the RF levels in watts from the ground technician. Report this value in Field 12.

j. Roll-Out Procedures. When roll-out procedures are checked IAW Order 8200.1 for any localizer, explain in Field 12 (e.g., Roll-out procedures SAT/UNSAT, airborne (50 ft) evaluation SAT/UNSAT for future checks) and enter the Zone 4 and Zone 5 structure found airborne. When the rollout procedures is found UNSAT, enter the following remark on the Facility Data Sheet, "Rollout UNSAT. Z4 and Z5 structure analysis not required".

k. Localizer Clearances in Narrow. When Localizer clearances are flown in the narrow configuration, enter the low clearance microamp values and locations as shown in subparagraph 6h.

FLIGHT INSPECTION REPORT—INSTRUMENT LANDING SYSTEM
FIGURE 1. FAA FORM 8240-8

FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM														REVIEW INITIALS	
1. LOCATION:														2. IDENT:	
3. RUNWAY NO:				4. DATE(S) OF INSPECTION:								5. OWNER:			
6. TYPE OF INSPECTION				SITE EVALUATION				PERIODIC				SPECIAL			
				COMMISSIONING				SURVEILLANCE				INCOMPLETE			
7. FACILITY INSPECTED		LOCALIZER		SDF		GLIDE SLOPE		75 mHz MARKERS				DME			
		LDA		TLS		LIGHTING SYSTEM		COMPASS LOCATORS				OTHER			
8. AZIMUTH															
FRONT COURSE						COMD WIDTH:		BACK COURSE							
TX 1			TX 2			CATEGORY:		TX 1			TX 2				
OT	INITIAL	FINAL	OT	INITIAL	FINAL			OT	INITIAL	FINAL	OT	INITIAL	FINAL		
						COURSE WIDTH									
						SYMMETRY									
						MODULATION									
						CLEARANCE 150									
						CLEARANCE 90									
						COURSE STRUCTURE-Z 1									
						COURSE STRUCTURE-Z 2									
						COURSE STRUCTURE-Z 3									
						COURSE STRUCTURE-Z 4									
						COURSE STRUCTURE-Z 5									
						VERTICAL POLARIZATION									
						ALIGNMENT									
						IDENTIFICATION									
						VOICE									
						USABLE DISTANCE									
						MONITOR									
						COURSE WIDTH (Narrow)									
						COURSE WIDTH (Wide)									
						CLEARANCE 150									
						CLEARANCE 90									
						ALIGNMENT 150									
						ALIGNMENT 90									
9. GLIDE SLOPE						10. GENERAL				SAT		UNSAT			
TX 1			TX 2			COMD ANGLE:		75 mHz MARKERS							
OT	INITIAL	FINAL	OT	INITIAL	FINAL	CATEGORY:		COMPASS LOCATORS							
						ANGLE		DME							
						MODULATION		LIGHTING SYSTEMS							
						WIDTH		SIAP(S) VERIFIED							
						STRUCTURE BELOW PATH		11. FACILITY STATUS		F/C	G/S	B/C			
						SYMMETRY		UNRESTRICTED							
						PATH STRUCTURE-Z 1		RESTRICTED							
						PATH STRUCTURE-Z 2		UNUSABLE							
						PATH STRUCTURE-Z 3		ILS CLASSIFICATION SYSTEM							
						CLEARANCE BELOW PATH		NOTAM's:							
						USABLE DISTANCE									
12. REMARKS:															
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO:					
FIO:															

**APPENDIX 9. FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM
SUPPLEMENTAL SHEET, FAA FORM 8240-9**

This form is intended for use as a supplement to FAA Form 8240-8, Flight Inspection Report-Instrument Landing System, and will be used only as an attachment to a properly completed FAA Form 8240-8. When only checking a localizer-type facility, phasing data may be reported in Field 12 of FAA Form 8240-8 in lieu of completing this form.

- a. Field 1 - Location.** Entry identical to Field 1 of the ILS report, FAA Form 8240-8.
- b. Field 2 - Identification (Ident).** Entry identical to Field 2 of the ILS report, FAA Form 8240-8.
- c. Field 3 - Date/Dates of Inspection.** Entry identical to Field 4 of the ILS report, FAA Form 8240-8.
- d. Field 4 - Glide Slope.** Enter the applicable path angle, path width, and structure below path for each condition outlined below.

NOTE: If the actual path angle was determined during the inspection, apply the correction factor (per Order 8200.1A, Section 217) to all reported on-path, level run angles.

(1) Field 4a - Glide Slope Type. Enter the type of glide slope being reported. Use the suggested abbreviations shown in Appendix 7, Paragraph 11(4).

(2) Field 4b - Dephase.

(a) Advance TX1/TX2. Enter the measured values for each listed parameter and transmitter.

(b) Retard TX1/TX2. Enter the measured values for each listed parameter and transmitter.

(3) Field 4c - Path Angle Lowered to Limit. Enter the measured values for each listed parameter and transmitter when the path angle has been lowered to the monitor limit setting.

(4) Field 4d - Path Angle Raised to Limit. Enter the measured values for each listed parameter and transmitter when the path angle has been raised to the monitor limit setting.

(5) Field 4e - Path Width Narrowed to Limit. Enter the measured values for each listed parameter and transmitter when the path width has been narrowed to the monitor limit setting.

(6) Field 4f - Path Width Widened to Limit. Enter the measured values for each listed parameter and transmitter when the path width has been widened to the monitor limit setting; for capture effect facilities, leave this field blank and complete Field 4g.

(7) Field 4g - Clearance TX Modulation Decreased to Limit (Primary TX Wide Limit).

Enter the measured values for each listed parameter and transmitter when the clearance TX modulation level has been decreased to the monitor limit setting while the path width of the primary TX is in the monitor wide limit setting.

(8) Field 4h - Attenuate Middle Antenna to Limit TX1/TX2. Enter the measured values for each listed parameter and transmitter when the middle antenna signal is attenuated to the monitor limit setting.

(9) Field 4i - Attenuate Upper Antenna to the Limit TX1/TX2. Enter the measured values for each listed parameter and transmitter when the upper antenna signal is attenuated to the monitor limit setting.

(10) Field 4j - Transverse Structure. Complete when endfire glide slope transverse structure is checked but FAA Form 8240-19 completion is not required.

(a) Enter the glide slope crosspointer deflection (microamps/90Hz or 150 Hz) at the localizer 150 μ A points left and right of localizer centerline, as referenced to the glide slope crosspointer found at localizer centerline. For example, at localizer centerline, the received signal is 10 μ A of 90 Hz, and at the right side localizer 150 μ A point, the received value is 15 μ A of 150 Hz. The reported value in the "Right of CL" section of the Transverse Structure block shall be 25 μ A/150Hz.

(b) Reference the localizer crosspointer transition for right/left determination (150 Hz = Right).

(c) In the "RADIUS" block, enter the distance in nautical miles from the localizer centerline abeam the glide slope.

(d) In the "ALTITUDE" block, enter the altitude flown, divided by 100.

(11) Field 4k - Modulation Balance TX1/TX2. Enter the crosspointer deflection in microamps and the predominate 90 Hz or 150 Hz modulation for each transmitter. Enter zero if obtained.

(12) Field 4l - Phasing TX1/TX2. Enter the same as subparagraph d(11), modulation balance.

(13) Field 4m - Front Course Area Where Phasing Was Conducted. In the "NM" block, enter the segment distance in nautical miles from the glide slope antenna where phasing repeatability existed (e.g., 4/1). In the "MSL" block, enter the altitude flown above mean sea level.

(14) Field 4n - Clearance Below Path TX1/TX2. Enter "S" if all clearances below path runs are satisfactory. If any checks are unsatisfactory, place an asterisk in this field and explain in Field 5.

e. Field 5 - Remarks. Use Field 5 to clarify any reported conditions in other fields. When reporting localizer phasing (e.g. enter the start/stop distance from the localizer antenna, the course sector side (90 Hz or 150 Hz), the offset from centerline (in degrees), and the MSL altitude flown).

**FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM
SUPPLEMENTAL SHEET
FIGURE 1. FAA FORM 8240-9**

PAGE OF PAGES									
FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM SUPPLEMENTAL SHEET								REVIEW INITIALS	
1. LOCATION:								2. IDENT:	
3. DATE(S) OF INSPECTION:									
4. GLIDE SLOPE									
4a. GLIDE SLOPE TYPE:				PATH ANGLE		PATH WIDTH		STRUCTURE BELOW PATH	
				TX 1	TX 2	TX 1	TX 2	TX 1	TX 2
4b. DEPHASE	ADVANCE	TX 1	TX 2						
	RETARD	TX 1	TX 2						
4c. PATH ANGLE LOWERED TO LIMIT									
4d. PATH ANGLE RAISED TO LIMIT									
4e. PATH WIDTH NARROWED TO LIMIT									
4f. PATH WIDTH WIDENED TO LIMIT									
4g. CLEARANCE TX MODULATION DECREASED TO LIMIT - (PRIMARY TX WIDE LIMIT)									
4h. ATTENUATE MIDDLE ANT TO LIMIT		TX 1	TX 2						
4i. ATTENUATE UPPER ANT TO LIMIT		TX 1	TX 2						
4j. TRANSVERSE STRUCTURE		TX 1	LEFT OF CL uA Hz				RIGHT OF CL uA Hz		
RADIUS	ALT	TX 2	LEFT OF CL uA Hz				RIGHT OF CL uA Hz		
4k. MODULATION BALANCE				TX 1			TX 2		
4l. PHASING				TX 1			TX 2		
4m. FRONT COURSE AREA WHERE PHASING WAS CONDUCTED						NM		MSL	
4n. CLEARANCE BELOW PATH				TX 1			TX 2		
5. REMARKS									

APPENDIX 10

(RESERVED)

APPENDIX 11. FLIGHT INSPECTION REPORT - ILS/MLS
MAINTENANCE ALERT, FAA FORM 8240-11

This form is intended to be used:

(1) To report ILS/MLS maintenance alert results following a normal periodic check without monitors when a measured flight inspection parameter is equal to or exceeds 60 percent of the flight inspection tolerance

(2) When a CAT III ILS facility is found operating beyond the "adjust and maintain" limits specified in Order 8200.1, Paragraph 217.47.

A Flight Inspection Central Operations (FICO) person will normally complete this form, based on flight crew input.

a. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

b. Field 2 - Identification (Ident). Complete as shown in Chapter 2, Paragraph 12.

c. Field 3 - Date/Dates of Inspection. Complete as shown in Chapter 2, Paragraph 12.

d. Field 4 - Parameter. Enter a description of the parameter under evaluation, which was found to be equal to or exceeding the defined tolerance criteria. Enter number of transmitter radiating, if known. Example: Glide Slope Path Width, TX 1. For value equal to or exceeding 60 percent of Flight Inspection (FI) tolerance, enter the measured value of the parameter, which is equal to or exceeds 60 percent of FI tolerances. (Example: Glide slope optimum path width = .70°. Maximum path width = .90°. so: $.90^\circ - .70 = .20^\circ$, which equals the allowable deviation from optimum. Multiply .60 times .20 and add resultant to .70 for the value (i.e., $.60 \times .20 = .12 + .70 = .82$). Any value equal to or exceeding .82° would require an ILS maintenance alert be issued.

e. Field 5. Enter the name of the person at the FICO who received alert results from the flight crew.

f. Field 6. Remarks. Use Field 6 to clarify any reported conditions in other fields. When the FICO forwards the ILS/MLS maintenance alert results to the regional maintenance engineering branch by telephone, enter the name of the person contacted and date, if different from date of inspection.

[illegible]

APPENDIX 12. FLIGHT INSPECTION REPORT--SURVEILLANCE RADAR,
FAA FORM 8240-12;
AND
SURVEILLANCE RADAR COVERAGE PLOT,
FAA FORM 8240-12-1

1. FAA Form 8240-12, Flight Inspection Report--Surveillance Radar, is designed as a one-page report for surveillance radar inspections. However, when reporting horizontal and vertical coverage characteristics, FAA Form 8240-12-1, Surveillance Radar Coverage Plot, is required. The surveillance radar coverage plot shall always be a supplement of a surveillance radar report.

a. Field 1 - Location. Enter the city or military installation, state or country, where the radar antenna is located, (e.g. Tinker AFB ARPT, Oklahoma City, OK). If there are multiple radar antenna inputs and more space is required, place an asterisk in this block and explain in Field 14.

b. Field 2 - Identifier (IDENT). Enter the location identifier published in Order 7350.5 for the location shown in Field 1, except for ARSR facilities. An ARSR facility will use the identifier of the controlling ARTCC, with an alpha subcode, of the radar location in Field 1 (e.g., the Fort Worth, Texas, ARTCC location identifier is ZFW and the alpha subcode is "A", therefore use ZFWA).

NOTE 1: Where more than one ASR is installed at the same location, each will be identified by the facility identifier plus an alpha subcode (e.g., TIKA, TIKB).

NOTE 2: Where more than one ARSR serves one ARTCC, each will be identified by the ARTCC identifier plus an alpha subcode (e.g., ZFWA, ZFWB).

c. Fields 4--6. Complete as shown in Chapter 2, Paragraph 12.

d. Field 7 - System Inspected.

(1) ASR, ARSR, SECRA, MSAW. Enter an "X" in the appropriate block(s) to indicate the type(s) of facilities inspected. **(If MSAW is the only check accomplished, enter an "X" in the MSAW block only).**

(2) Ground Equipment Type. Insert the designation of the ground equipment type (e.g., FPN-47 for primary and ATCBI-3 for secondary radar will be entered as FPN-47/ATCBI-3). ASR/9 or ASR/8 radar facilities installed with Mode S capability will be designated as equipment type ASR/9/Mode S or ASR/8/Mode S. If the radar facility is Mode S capable but operating in Interim Beacon Interrogator (IBI) Mode, report as follows: ASR/9 or ASR/8/Mode S (IBI).

e. Field 8 - Scope Location. Enter the location of the controller scope (e.g., Washington, D.C. ARTCC; Scott AFB, IL. RAPCON).

f. Field 9 - Fix Coverage.

(1) Fix Name. Identify the radar fix inspected.

(2) Airway. Identify the airway associated with the fix. (e.g., V47, J123W).

(3) Altitude. Enter the lowest altitude checked at which coverage is satisfactory. Enter the altitude divided by 100 (e.g., 2500 feet would be 25).

(4) Channel. Enter the radar channel evaluated (e.g., A or B).

(5) Satisfactory/Unsatisfactory (SAT/UNSAT). Enter an "X" in the appropriate block, to indicate the status of the fix.

g. Field 10 - Fixed (Fix) Target Identification (Ident)/Orientation Checkpoint.

(1) Check Point. A numerical listing is assigned to each checkpoint (e.g. #1, #2, #3, etc.)

(2) Channel. Enter the radar channel used during the checks (e.g., A or B).

(3) Azimuth (Radar/Chart). Enter the azimuth bearing from the radar antenna, as determined at the radar scope, and the actual azimuth bearing determined from a chart or AFIS.

(4) Distance (Radar/Chart). Enter the distance from the radar antenna as determined at the radar scope and the actual distance, determined from a chart or AFIS.

h. Field 11 - Route Coverage.

(1) Route. Show the designation of the route checked (e.g., J123W, V12).

(2) From/To. Indicate the segment, in nautical miles, of the route checked or the name of the fix being checked.

(3) Channel (CHAN). Enter the radar channel evaluated (e.g., A or B).

(4) Altitude (ALT). Enter the lowest satisfactory coverage altitude checked. Enter the altitude divided by 100 (e.g. 2,500 ft would be 25).

(5) Polarization (POLAR). Enter the type of polarization used during the check. For MPN-25, indicate rain mode or clear mode, as appropriate.

(6) Moving Target Indicator (MTI). Enter "Y" (Yes) or "N" (No) to indicate if the MTI feature was in use.

(7) Secondary Radar (SECRA). Enter "Y" (Yes) or "N" (No) to show if the SECRA was operating satisfactorily during the inspection of the route.

(8) Satisfactory (SAT)/Unsatisfactory (UNSAT). Enter an "X" in the appropriate block to indicate the status of the route.

i. Field 12 - Surveillance Approaches.

(1) Airport. Enter the name and state of the airport where each approach terminates.

(2) Runway (Rwy). Indicate the runway numbers where the approaches terminate.

(3) Approach Condition. List any conditions that affected the approaches or radar operation (e.g., adverse weather).

(4) Position (POS) - Map. Indicate the position of the aircraft (in feet) relative to the runway edge extended, at the procedural missed-approach point. An aircraft 300 feet left of the runway edge, at a missed approach point that is 0.5 nm from the runway threshold, would be reported as: 300 L / 0.5 nm.

(5) Polarization (POLAR). Indicate the type of polarization used during the approach. For MPN-25, indicate rain mode or clear mode, as appropriate.

(6) Moving Target Indicator (MTI). Enter "Y" (Yes) or "N" (No) to indicate if the MTI feature was used.

(7) Channel (CHAN). Enter the radar channel evaluated (e.g., A or B).

(8) Satisfactory (SAT)/Unsatisfactory (UNSAT). Enter an "X" in the appropriate block to indicate the status of each approach.

j. Field 13 - Standby Power. Enter an "X" in the appropriate block. If not checked, leave blank."

k. Field 14 - Remarks. Complete as shown in Chapter 3. When appropriate, list:

(1) When a major modification has been performed.

(2) When MTI is required for the ASR approach. (This requirement does not constitute a facility restriction.)

(3) When an air traffic control radar beacon system (ATCRBS) power optimization check is performed, report the interrogator power values. If dual equipment is installed, report the value for each transponder.

(4) When equipment changes/modifications are made and the inspection is used to reestablish the coverage, for example, "This inspection reestablishes the coverage and performance of the (ASR/ARSR/ACTRBS). The results found on this inspection will be the basis for subsequent performance." The remark may be expanded to be more specific.

2. FAA Form 8240-12-1, Surveillance Radar Coverage Plot. Check either ASR or ARSR, as appropriate.

NOTE: The flight inspector shall complete this form only if requested by ground personnel.

a. Field 1 - Location. Enter as shown in Paragraph 1 of this appendix.

b. Field 2 - Date/Dates of Inspection. Entry identical to the entry in Field 4 of the surveillance radar report.

c. Field 3 - Ground Equipment Type. Enter the same as the ground equipment type portion of field 7 of the surveillance radar report.

d. Field 4 - Aircraft Type. Specify the type of aircraft used for the inspection (e.g., NA-265, BE-300, C-140).

e. Field 5 - Antenna Tilt. Enter an "X" in the appropriate block. Variable (VAR) tilt antenna means the antenna tilt can be controlled from a remote position.

f. Field 6 - Optimum Angle. Show the mechanical antenna tilt angle which has been selected as the optimum for the installation being inspected.

g. Field 7 - Vertical Coverage. Plot the inner and outer fringe vertical coverage limits of the radar by placing a dot at each altitude and distance where the target returns become unusable. Connect the dots around the inner and outer coverage areas with a solid line. Show any holes noted within this vertical coverage area by placing dots at the extremities of the holes and enter the word "hole" between the dots. Plot vertical coverage results of secondary radar using dash lines to connect points of coverage in the same manner as that specified for the surveillance radar. If a secondary radar coverage plot is not required, a statement "secondary radar exceeds primary" is satisfactory.

(1) Inbound/Outbound (IN-BND/OUT-BND). The inbound and outbound columns in the "Vertical Coverage" field refer to the direction of flight during the outer fringe checks. Place an "X" in the appropriate block.

(2) Altitude (ALT). Place an "X" in the appropriate column to indicate the altitude scale. If necessary, blank out any numbers and enter the correct altitudes. These numbers indicate the actual altitudes divided by 1,000.

(3) Reference Azimuth. Enter the azimuth used for vertical coverage checks.

(4) Special Notes. Enter MTI GATE or any other data that may be used to aid in evaluating vertical coverage results.

(5) Mileage Scales. Place an "X" in the block to indicate the mileage scale applicable to this plot. The numbers shown are nautical miles.

(6) Outside Air Temperature (OAT). Enter the outside air temperature (OAT) in degrees centigrade (corrected to true) opposite each altitude plotted.

h. Field 8 - Horizontal Coverage. The horizontal coverage plot is subdivided into three separate circle graphs, the "A," "B," and "C" rings. The "A," "B" and "C" rings are associated with the information in Field 9, the "radar parameters" and "horizontal" columns. Each of these graphs consists of an amplitude of four lines, the circumferences of which are divided into 360°. The four lines of each graph represent target strengths of 0 (for unusable) through strength 3 (definitions of target quality will be found in Order 8200.1, Section 215). Up to three plots or portions thereof may be made in order to depict conditions during the inspection.

i. Field 9 - Radar Parameters. This field defines conditions of the radar during the vertical or horizontal checks. Entries in the "plot" column depict a condition or parameter setting of the radar during a particular check. Entries in the vertical (VERT) column indicate if a parameter or condition was applicable during the vertical check. Entries in the "A," "B," and "C" columns under the word "horizontal," indicate if a parameter or condition was applicable during the associated horizontal coverage plots. The options, orbit radius, altitude divided by 100, antenna tilt, scope range, and OAT under the "plot" column, require the entry of numerical values (e.g., scope range 50 means the radar is certified to 50 nm). The remaining "plot" column options shall be circled, if applicable. If any options are unknown, leave blank.

FLIGHT INSPECTION REPORT—SURVEILLANCE RADAR
FIGURE 1. FAA FORM 8240-12

FLIGHT INSPECTION REPORT—SURVEILLANCE RADAR												REVIEW INITIALS															
1. LOCATION:										2. IDENT:																	
3. COMMON SYSTEM:				4. DATE(S) OF INSPECTION:						5. OWNER:																	
6. TYPE OF INSPECTION				SITE EVALUATION				PERIODIC				SPECIAL															
				COMMISSIONING				SURVEILLANCE				INCOMPLETE															
7. SYSTEM INSPECTED		ASR		ARSR		SECRA		MSAW		GROUND EQUIPMENT TYPE:																	
8. SCOPE LOCATION:																											
9. FIX COVERAGE						9. FIX COVERAGE (Continued)																					
FIX NAME	AIRWAY	ALTITUDE	CHANNEL	SAT	UNSAT	FIX NAME	AIRWAY	ALTITUDE	CHANNEL	SAT	UNSAT																
10. FIX TARGET IDENT / ORIENTATION CHECK POINT																											
						CHECK POINT	CHANNEL	AZIMUTH		DISTANCE																	
								RADAR	CHART	RADAR	CHART																
11. ROUTE COVERAGE																											
ROUTE	FROM		TO		CHAN.	ALT.	POLAR.	MTI	SECRA	SAT.	UNSAT.																
12. SURVEILLANCE APPROACHES																											
AIRPORT	RWY	APPROACH CONDITION				POS. - MAP		POLAR.	MTI	CHAN	SAT	UNSAT.															
						/ NM																					
						/ NM																					
						/ NM																					
						/ NM																					
						/ NM																					
						/ NM																					
13. STANDBY POWER:																											
				SATISFACTORY				UNSATISFACTORY																			
14. REMARKS:																											
FACILITY STATUS																											
UNRESTRICTED																											
RESTRICTED																											
UNUSABLE																											
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO :																	
FIO:						N/A																					

FAA FORM 8240 - 12 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-8)

FLIGHT INSPECTION REPORT—SURVEILLANCE RADAR COVERAGE PLOT **FIGURE 2. FAA FORM 8240-12-1**

PAGE OF PAGES

FLIGHT INSPECTION REPORT -- SURVEILLANCE RADAR COVERAGE PLOT										ASR ARSR			
1. LOCATION:					2. DATE(S) OF INSPECTION:								
3. GROUND EQUIP TYPE:				4. AIRCRAFT TYPE:			5. ANTENNA TILT FIXED VAR.		6. OPTIMUM ANGLE:				
7. VERTICAL COVERAGE													
IN-BND	OUT-BND	ALT.	REFERENCE AZIMUTH:					SPECIAL NOTES:				OAT	
		45											
		40											
		35											
		30	10										
		25	9										
		20	8										
		19	7										
		18	6										
		17	5										
		16	4										
		15	3										
		14	2										
		13	1										
MILEAGE SCALES			5	10	15	20	25	30	35	40	45		
			10	20	30	40	50	60	70	80	90		
			20	40	60	80	100	120	140	160	180		
8. HORIZONTAL COVERAGE													
9. RADAR PARAMETERS													
PLOT		Vert.	Horizontal										
			A	B	C								
ORBIT RADIUS													
ALTITUDE / 100													
ANTENNA TILT													
SCOPE RANGE													
OAT													
EQUIPMENT CHANNEL			A B	A B	A B								
POWER SOURCE		P S	P S	P S	P S								
POLARIZATION		C L	C L	C L	C L								
MTI		ON OFF	ON OFF	ON OFF	ON OFF								
AFC		ON OFF	ON OFF	ON OFF	ON OFF								
FTC		ON OFF	ON OFF	ON OFF	ON OFF								
STC		ON OFF	ON OFF	ON OFF	ON OFF								
SECONDARY RADAR		ON OFF	ON OFF	ON OFF	ON OFF								
ADVISORIES		S U	S U	S U	S U								
RANGE ACCURACY		S U	S U	S U	S U								
AZIMUTH ACCURACY		S U	S U	S U	S U								
COVERAGE		S U	S U										
REGION:		FLIGHT INSPECTOR'S SIGNATURE:		TECHNICIAN'S SIGNATURE:									
FIO:				N/A									
				AIRCRAFT NO :									

FAA FORM 8240 - 12 - 1 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-9)

APPENDIX 13. FLIGHT INSPECTION REPORT--GENERAL CHARACTERISTICS
FAA FORM 8240-13

This form is used to report conditions which cannot be reported on the other forms or to report facilities which are not routinely inspected (e.g., taxi-way lights, airport services, etc.).

a. Field 1 - Location. Facility location information will be obtained from the AVNIS Facility Data Sheet. Enter the airport name, location, and country code for facilities located outside the United States and the airport name, location, and state code for facilities within the United States. If the airport name is the same as the location, enter only once.

b. Field 2 - Identifier (Ident). Complete as shown in Chapter 2, Paragraph 12.

c. Fields 3--6. Complete as shown in Chapter 2, Paragraph 12.

d. Field 7 - Facility Component Inspected. Check the appropriate block. If the facility inspected is not contained in this field, mark the "other" block and enter in Field 8. If an extensive narrative is required and requires more space, put an asterisk in Field 8 and complete in Field 12.

e. Field 8 - Facility Type and Class. Enter the facility type and class if not listed in Field 7.

f. Field 9 - Out-of-Tolerance Conditions Initially Found. List all discrepancies not covered by a current, published NOTAM. Place an "X" in the appropriate column to show if the discrepancies were corrected or not.

g. Field 10 - Was a NOTAM Issued Based on the Results of This Inspection? Place an "X" in the appropriate block and list the NOTAM in the NOTAM block.

h. Field 11 - Is There a Previous NOTAM in Effect? Place an "X" in the appropriate block.

i. Field 12 - Remarks. Complete as shown in Chapter 3.

j. Facility Status. Complete as shown in Chapter 2, Paragraph 12.

k. NOTAM's. Complete as shown in Chapter 3, Paragraph 21.

FLIGHT INSPECTION REPORT--GENERAL CHARACTERISTICS
FIGURE 1. FAA FORM 8240-13

FLIGHT INSPECTION REPORT--GENERAL CHARACTERISTICS						REVIEW INITIALS									
1. LOCATION:						2. IDENT:									
3. COMMON SYSTEM:			4. DATE(S) OF INSPECTION:			5. OWNER:									
6. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL									
		COMMISSIONING		SURVEILLANCE		INCOMPLETE									
7. FACILITY COMPONENT INSPECTED		AIRPORTS		LIGHTING SYSTEMS		OTHER (Explain)									
8. FACILITY TYPE AND CLASS:															
9. OUT OF TOLERANCE CONDITIONS INITIALLY FOUND <i>(Except those covered by previous NOTAM)</i>						CORRECTED									
						YES	NO								
10. WAS A NOTAM ISSUED BASED ON THE RESULTS OF THIS INSPECTION ?				YES	11. IS THERE A PREVIOUS NOTAM IN EFFECT ?		YES								
				NO			NO								
12. REMARKS <i>(Clarify conditions pertinent to facility integrity not otherwise shown in this report).</i>															
FACILITY STATUS		NOTAMs:													
UNRESTRICTED															
RESTRICTED															
UNUSABLE															
REGION:		FLIGHT INSPECTOR'S SIGNATURE:			TECHNICIAN'S SIGNATURE:		AIRCRAFT NO :								
FIO:															

FAA FORM 8240 - 13 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-14)

APPENDIX 14. FLIGHT INSPECTION REPORT--AFTER ACCIDENT
CONTINUATION SHEET, FAA FORM 8240-14

1. Purpose. The flight inspection after accident report (AA) shall contain facility performance information and other conditions related to an accident or near mid-air collision or incident. The reported information shall be obtained during a special AA inspection.

2. Reporting. Complete a flight inspection facility performance report (see Paragraph 4 of this appendix) and FAA Form 8240-14, Flight Inspection Report--After Accident Continuation Sheet, (see Paragraph 5 of this appendix) for each facility involved in the accident or incident. The objective of the AA reporting procedure is to ensure that each report is complete, accurate, and reflects only the facility performance and status, as measured during the AA inspection. Therefore, report only "as found" conditions. The AA report commands the highest priority for a pre-distribution review and final approval. Special distribution requirements for this type of report are described in Chapter 2, paragraph 16b; and special review procedures are described in Paragraph 3 of this appendix.

a. Incomplete Inspections. If all the requirements of the AA inspection cannot be completed in one inspection (i.e., a visual check of the site area is required but cannot be made due to weather or other factors), the final report shall contain the dates and information from all previous inspections.

b. Reporting Corrected Out-of-Tolerance Conditions. Out-of-tolerance conditions found during an AA inspection shall not be corrected until after the AA inspection is completed. Report the out-of-tolerance condition, the corrected condition, and the results of any additional checks on a separate "special" maintenance request (MR) report. Explain the reason for this check in the remarks field (e.g., special inspection to correct out-of-tolerance conditions found during the AA inspection of (date)).

c. Periodic Update. An after-accident inspection may be used to update the periodic interval if two conditions are met.

- (1) No out-of-tolerance conditions are found.
- (2) All periodic requirements were completed.

In this case, state in the remarks field of the facility performance report that periodic requirements were met.

3. Special Report Review. The Flight Inspector shall expeditiously complete and forward a preliminary AA report, plus supporting worksheets, to the Flight Inspection Technical Support Branch, AVN-210, for review and approval. The names of the flight inspector and the electronics technician (if required) shall be printed in the signature blocks. AVN-210 will notify the flight inspector and the appropriate office manager of the results of the review. Upon receipt of the preliminary report approval, a final report shall be completed, signed, and forwarded to the Flight Inspection Records Team, AVN-210A, along with all corresponding worksheets and recordings.

4. Facility Performance Report Completion. To complete the facility performance portion of the AA report, use the guidelines as described in Chapters 2 and 3 and the appropriate appendixes of this order (e.g., ILS AA report shall be reported on FAA Form 8240-8, using Appendix 8; VORTAC AA report shall be reported on FAA Form 8240-2, using Appendix 2). Assign a facility classification (status) based on the results of the AA inspection.

5. FAA Form 8240-14, Flight Inspection Report--After Accident Continuation Sheet, Completion.

a. Fields 1, 2, 4. Information in these fields will be the same as the corresponding fields on the facility performance report.

b. Field 3. Enter the facility type.

c. Field 5 - Date and Time of Accident. Enter the month, day, year, and universal coordinated time (UTC) of the accident (e.g., 1/12/89, 1400Z). If the date and time are unknown, enter "UNKNOWN."

d. Field 6 - Aircraft Type and Number. Enter the aircraft manufacturer, model number, and number of the aircraft involved in the accident.

e. Field 7 - Procedures in Use at Time of Accident. Enter the procedure being used by the aircraft at the time of the accident (e.g., Nashville Metropolitan Airport, Nashville, TN, ILS Rwy 02L, Amdt. 1.). If this information is not available, enter "UNKNOWN." A "SAT" or "UNSAT" entry is not required.

f. Field 8 - Equipment in Use at Time of Accident. Enter the facility transmitter, receiver, or channel number that was in use at the time of accident. If the facility has a single transmitter, so state. For coordinate-based RNAV procedures, leave blank.

g. Field 9 - Date and Time of After Accident Inspection. Enter the date and UTC the AA flight inspection was started (e.g., 11/17/89, 1626Z).

h. Field 10 - Weather Conditions at Time of Inspection. Enter the weather conditions prevailing at the start of the inspection. Use plain English, do not use symbols.

i. Field 11 - Procedures Inspected and Extent of Inspection. Enter the procedure(s) inspected. If the entry is the same as in Field 7, enter the note, "Same as Field 7" and describe the extent of the SIAP inspected (e.g., "evaluated the final approach segment). A "SAT" or "UNSAT" is not required.

j. Field 12 - SIAP Obstacle Clearance Checked. Check the SIAP for compliance with FAA Order 8200.1, United States Flight Inspection Manual, Section 214. Place an "X" in the appropriate block.

k. Field 13 - Name and Routing Symbol of Accident Coordinator/Investigator. Enter the name and routing symbol of the person acting in the capacity of the accident coordinator/investigator for the accident being reported. If this person is not an FAA employee, enter the name and business or military address.

l. Field 14 - Remarks. Enter any information required to clarify data in Fields 1--14. When all facility parameters are found within tolerance and no performance discrepancies are discovered, enter the following statement: "Facility operation found satisfactory." For coordinate-based RNAV procedures, enter "RNAV performance found satisfactory". When there is a request to check the MSAW (Minimum Safe Altitude Warning) system as part of the AA inspection, enter a remark indicating the results.

FLIGHT INSPECTION REPORT--AFTER ACCIDENT CONTINUATION SHEET
FIGURE 1. FAA FORM 8240-14

PAGE OF PAGES	
FLIGHT INSPECTION REPORT--AFTER ACCIDENT CONTINUATION SHEET	
1. LOCATION:	2. IDENT:
3. FACILITY TYPE:	4. DATE(S) OF INSPECTION:
5. DATE AND TIME OF ACCIDENT:	6. AIRCRAFT TYPE AND NUMBER:
7. PROCEDURES IN USE AT TIME OF ACCIDENT:	
8. EQUIPMENT IN USE AT TIME OF ACCIDENT:	
9. DATE AND TIME OF AFTER ACCIDENT INSPECTION:	DATE: TIME:
10. WEATHER CONDITIONS AT TIME OF INSPECTION:	
11. PROCEDURES INSPECTED AND EXTENT OF INSPECTION:	
12. SIAP: <input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY	13. NAME AND ROUTING SYMBOL OF ACCIDENT COORDINATOR/INVESTIGATOR
14. REMARKS:	

APPENDIX 15. FLIGHT INSPECTION REPORT--LORAN-C
FAA FORM 8240-15

This report shall be used for reporting all site, commissioning, periodic, special, and other inspections. It can be used as a Loran-C worksheet when conducting flight inspection evaluations. Record the following information:

a. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

b. Field 2 - Identification (Ident). Enter the identification for the approach as listed in AVNIS. For approaches which terminate at a point in space, enter the identification as listed in AVNIS. List all airports served by the point in space approach in Field 11.

c. Field 3 - Common System. Complete as shown in Chapter 2, Paragraph 12.

d. Field 4 - Date/Dates of Inspection. Complete as shown in Chapter 2, Paragraph 12.

e. Field 5 - Runway. Enter the runway number served by the Loran-C approach being inspected. If the approach is not to a specific runway, leave blank.

f. Field 6 - Type of Inspection. Complete as shown in Chapter 2, Paragraph 12.

g. Field 7 - Loran Stations.

(1) Owner. Mark the block of the owner of the stations used during the SIAP; if the "Other" block is marked, enter the name of the owner.

(2) Loran Chain. Enter the numerical chain number of the station transmitters published for use on the procedure (e.g., 9960).

(3) Dedicated Triad. Enter the letter identifier of each Loran-C transmitter published for the procedure (e.g., M, X, Y).

h. Field 8 - Local Area Monitor (LAM) Data.

(1) LAM Name. Enter the name of the facility where the local area monitor (LAM) is located (e.g., ABC VTAC). If a LAM is not required, enter "none" and explain in Field 11. If "none" is entered, the remainder of Field 8 should remain blank.

(2) LAM Location. Enter the latitude and longitude coordinates of the LAM location.

(3) Date Installed (not required for periodics, leave blank). Enter the date of the installation of the LAM. If unknown, enter "unknown."

(4) SIAP Distance. Not required.

(5) Area Calibration Date. Enter the date or time period for the receiver area TD calibration values, or TD correction factors used during the evaluation, or those values obtained from NFOLDS. If the values were obtained from the published TD correction factors (in the approach plates), an entry is not required. If a date(s) is not available, insert an asterisk and explain in Field 11.

(6) Calibration (Cal) Values, Stations (Sta). Enter the appropriate station letter identifier used during the evaluation and the related receiver microsecond TD calibration values. Enter in tenths of a microsecond (e.g., x = 1.5 micro sec, y = -2.3 micro sec).

(7) Area Calibration (Cal) Source. If the values were obtained from NFOLDS, enter NFOLDS. If the values were obtained from the published approach procedures, enter the approach plates and the effective dates (e.g., approach plates, SE VOL. 3, 4/30/92 - 6/25/92. If another source was used, enter the name and date of the source.

i. Field 9 - Waypoints Data.

(1) MAP/AER Waypoint (WPT). This waypoint shall be reported on every inspection. If the missed approach point (MAP) and the approach end of the runway (AER) are different locations and they are reported separately, mark out the inappropriate name and report the other WPT in Field 11.

(a) LAT/LON. Enter the published latitude and longitude coordinates of the appropriate waypoint.

(b) WPT Accuracy, NM. The accuracy of the MAP or AER waypoint shall be reported on every inspection. The reporting of the accuracy of the remainder of the SIAP waypoints is as required in Order 8200.1, Section 209. Enter the difference between the published location and the received signal location in tenths of a mile.

(c) Signal Quality, SAT/UNSAT. Report this information on all SIAP waypoints and offset segment checks. If all the signal parameters are satisfactory at the waypoint, place an "X" in the "SAT" space. If unsatisfactory, place an "X" in the "UNSAT" space and explain in the space provided or, if necessary, in Field 11.

(2) FAF, IAF, Transition (Trans), and Other Waypoints (Wpts). Report as shown in Paragraph i(1)(a), (b), or (c).

(3) Offsets. In the "distance" (DIST) block, enter the distance between the offset track and the final approach course in tenths of a mile. In the signal quality block, complete as shown in Paragraph i(1)(c).

j. Field 10 - Approach Evaluation.

(1) Human Factors Cockpit Workload. Complete using Order 8200.1, Section 214, Paragraph 214.43, as a guideline. Explain unsatisfactory conditions in the "Explain" block and in Field 11, if necessary.

(2) Approach Evaluation. Place an "X" in the appropriate block. Explain unsatisfactory conditions in the "Explain" block and in Field 11, if necessary.

(3) Obstacle Verification. Place an "X" in the appropriate block. Explain unsatisfactory conditions in the "Explain" block and in Field 11, if necessary.

k. Field 11 - Remarks. Note any additional information.

l. Approach Status. Mark the appropriate block to describe the classification of the SIAP at the completion of the evaluation.

m. NOTAM's. Complete as shown in Chapter 3, Paragraph 21.

FLIGHT INSPECTION REPORT - LORAN-C
FIGURE 1. FAA FORM 8240-15

FLIGHT INSPECTION REPORT--LORAN-C										REVIEW INITIALS	
1. LOCATION:										2. IDENT:	
3. COMMON SYSTEM:				4. DATE(S) OF INSPECTION:						5. RUNWAY:	
6. TYPE OF INSPECTION				SITE EVALUATION		PERIODIC		SPECIAL			
				COMMISSIONING		SURVEILLANCE		INCOMPLETE			
7. LORAN STATIONS											
OWNER		USCG	OTHER (Explain)				LORAN CHAIN				
		USAF					DEDICATED TRIAD				
8. LOCAL AREA MONITOR DATA											
LAM NAME:			LAM LOCATION	LAT:		DATE INSTALLED:		SIAP DISTANCE:			
				LON:							
AREA CALIBRATION DATE:			CAL VALUES	STA: MICRO SEC		AREA CAL SOURCE:					
				STA: MICRO SEC							
9. WAYPOINTS DATA											
MAP / AER WPT	LAT:		WPT ACCURACY:		NM	SIGNAL QUALITY	SAT	Explain:			
	LON:						UNSAT				
FAF WPT	LAT:		WPT ACCURACY:		NM	SIGNAL QUALITY	SAT	Explain:			
	LON:						UNSAT				
IAF WPT	LAT:		WPT ACCURACY:		NM	SIGNAL QUALITY	SAT	Explain:			
	LON:						UNSAT				
TRANS WPT	LAT:		WPT ACCURACY:		NM	SIGNAL QUALITY	SAT	Explain:			
	LON:						UNSAT				
OTHER WPTS	LAT:		WPT ACCURACY:		NM	SIGNAL QUALITY	SAT	Explain:			
	LON:						UNSAT				
OFFSETS	DIST:					SIGNAL QUALITY	SAT	Explain:			
							UNSAT				
10. APPROACH EVALUATION											
HUMAN FACTORS COCKPIT WORKLOAD		SAT	Explain:								
		UNSAT									
APPROACH EVALUATION		SAT	Explain:								
		UNSAT									
OBSTACLE VERIFICATION		SAT	Explain:								
		UNSAT									
11. REMARKS:											
APPROACH STATUS		NOTAMs:									
UNRESTRICTED											
RESTRICTED											
UNUSABLE											
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO :	
FIO:											

FAA FORM 8240 - 15 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-5)

APPENDIX 16. FLIGHT INSPECTION REPORTS--
MICROWAVE LANDING SYSTEM, FAA FORM 8240-16
AND
MLS COMMISSIONING DATA WORDS, FAA FORM 8240-16-1

FAA Form 8240-16 will be used for all MLS inspections. For commissioning inspections of all MLS equipment, FAA Form 8240-16-1, MLS Commissioning Data Words, is required. This form is installed in the FormFill program as page 2 of FAA Form 8240-16.

1. **Field 1 - Location.** Complete as shown in Chapter 2, Paragraph 12.
2. **Field 2 - Identification (Ident).** Complete as shown in Chapter 2, Paragraph 12.
3. **Fields 3 - 6.** Complete as shown in Chapter 2, Paragraph 12.
4. **Field 7. Runway No.** Enter runway number served by the MLS.
5. **Field 8 - Facility Inspected.** Place an "X" in the appropriate block(s) to signify components inspected. DME refers to DME or DME/P installed with the MLS (see Field 12). If an offset azimuth is inspected, enter a statement in Field 15.
6. **Field 9 - Azimuth.** Use this field to report the operational characteristics of the azimuth portion of the MLS.
 - a. **Azimuth (AZ) Course (CRS) Bearing (BRG).** Enter the designed front azimuth course bearing(s) that support the procedure(s).
 - b. **Back Azimuth (BAZ) Course (CRS) Bearing (BRG).** Enter the designed back azimuth course bearing(s) that support the procedure(s).
 - c. **Category.** Enter the category of the most stringent operations supported (e.g., Category I, II, or III).
 - d. **Front Azimuth/Back Azimuth (TX1/TX2).** Use these columns to report specific operational parameters for each transmitter. Use the "OT," "INITIAL," and "FINAL" columns as directed in Appendix 8, Paragraphs 6c, d, and e.
- (1) **Alignment.** Enter the azimuth MCE of the approach course azimuth in hundredths of a degree, left or right of the designed azimuth course when the alignment is determined by manual methods (e.g., 0.04L indicates the course is 0.04° left of the designated approach azimuth). Enter the alignment error of the approach course azimuth as presented by the AFIS when using automated methods (e.g., - 0.04 indicates the course is 0.04° right of the designated approach azimuth). For mobile MLS facilities, under the "Initial" column, enter the alignment as found at the beginning of the flight check.

(2) **Path Following Error (PFE).** Enter the most significant error in hundredths of a degree and tenths of a mile. (e.g., 0.04/0.8 indicates a 0.04° error at 0.8 nm from threshold)

(3) **Path Following Noise (PFN).** Enter as indicated in Paragraph 6d(2).

(4) **Control Motion Noise (CMN).** Enter as indicated in Paragraph 6d(2).

(5) **Out-of-Coverage Indications (OCI).** Enter "S" or "U", as appropriate, to indicate the results of the OCI check (whether or not OCI equipment installed). If OCI check is not performed, leave blank.

(6) **Clearance.** Enter "S" or "U", as appropriate, if clearances are installed. If clearances are not installed, leave blank. Leave blank for mobile MLS facilities.

(7) **Basic Data Words.** Enter "S" to signify all basic words transmitted by the facility are within specified limits of the facility data. If words are missing, incorrect, incomplete, or cannot be verified by other means, enter a "U." When commissioning mobile MLS facilities, under the "Initial" column, enter the status of the Data Words as found at the beginning of the flight check.

(8) **Auxiliary Data Words.** Enter "S" to signify all auxiliary words transmitted by the facility are within specified limits of the facility data. If words are missing, incorrect, incomplete, or cannot be verified by other means, enter a "U." When commissioning mobile MLS facilities, under the "Initial" column, enter the status of the Data Words as found at the beginning of the flight check.

(9) **Proportional (Prop) Guidance - Left.** Enter the commissioned maximum proportional guidance angle left of the procedural azimuth.

(10) **Proportional (Prop) Guidance - Right.** Enter the commissioned maximum proportional guidance angle right of the procedural azimuth.

(11) **Identification.** Enter "S" if the coded identification is satisfactory. Enter "U" if unsatisfactory.

(12) **Usable Distance.** If a minimum power check is conducted to check the service volume, enter the maximum distance in miles from the ARD where the check was satisfactory.

(13) **Monitor.**

(a) **MCE - Left (L) Reference.** Enter the course displacement from the as found normal MCE.

(b) **PFE - Left (L) Reference.** Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the course shifted left.

(c) **MCE - Right (R) Reference.** Enter the course displacement from the as found normal MCE.

(d) **PFE - Right (R) Reference.** Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the course shifted right.

7. Field 10 - Runway Azimuth. Use this field to report the operational characteristics of the azimuth portion of the MLS in the runway environment. Use the transmitter numbers as shown in field 9, "Azimuth," of this report form.

a. Zone-4/Zone-5. Complete each column using the same guidelines as directed for the "OT," "INITIAL," and "FINAL" columns in Appendix 8, Paragraphs 6c, d, and e.

b. PFE, PFN, CMN. Enter the most significant error in tenths of a foot and hundredths of a mile to runway threshold, for each zone (e.g., 4.0/0.80 indicates a 4.0 error at 0.80 nm from threshold).

8. Field 11 - Elevation. Use this field to report the operational characteristics of the elevation portion of the MLS.

a. Minimum Glidepath (MGP). Enter the commissioned minimum glidepath angle in degrees.

b. Category. Enter as indicated in paragraph 6c.

(1) Elevation Angle. Enter the measured, actual elevation angle in hundredths of a degree. If the reported angle is not the actual angle, explain in Field 15. For mobile MLS facilities, under the "Initial" column, enter the angle as found at the beginning of the flight check.

(2) PFE. Enter as indicated in Paragraph 6d(2).

(3) PFN. Enter as indicated in Paragraph 6d(2).

(4) CMN. Enter as indicated in Paragraph 6d(2).

(5) OCI. Enter as indicated in Paragraph 6d(5).

c. Below MGP Clearance. Enter "S" if clearance below the minimum glidepath is satisfactory. Enter "U" if unsatisfactory.

d. Usable Distance. If a minimum power check is conducted to check the service volume, enter the maximum distance in miles from the ARD where the check was satisfactory.

e. Monitor.

(1) PFE-Angle High. Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the angle shifted high.

(2) Elevation (EL) Angle High - Monitor Reference. Enter the elevation angle, in hundredths of a degree, with the elevation angle shifted high.

(3) Elevation Angle Low - Monitor Reference. Enter the elevation angle, in hundredths of a degree, with the elevation angle shifted low.

(4) PFE-Angle Low. Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the angle shifted low.

Appendix 16

9. Field 12 - General. This field is provided to document the operational performance of DME and lighting systems which are checked concurrently with the MLS. Additionally, for SIAP(s) checked IAW Order 8200.1A, USSFIM, Paragraph 214.31, enter an "X" in the appropriate block (i.e., satisfactory (SAT) or unsatisfactory (UNSAT)).

a. DME. Enter "X" in the appropriate block to indicate satisfactory or unsatisfactory operation.

b. Lighting Systems. Satisfactory means that all lighting features required to support the MLS are operational. If an out-of-tolerance condition is found and not corrected, indicate the lights are unsatisfactory and explain in Field 15.

10. Field 13 - Facility Status. If inspected, enter an "X" in the appropriate block for the appropriate component to indicate the status of each MLS component.

11. Field 14 - NOTAM's. Enter NOTAM's or facility restrictions as described in Appendix 8, Paragraph 9.

12. Field 15 - Remarks.

a. Exempted Structure. When out-of-tolerance PFE, PFN, or CMN is exempted by the provisions of Order 8200.1A, Paragraph 220.4, place an asterisk in the "OT" column next to the particular structure to be exempted and explain in field 15 (e.g., PFE SAT per Order 8200.1A, Paragraph 220.4).

b. Standby Control Electronic Unit (CEU): Enter the serial numbers of the primary and standby CEU when commissioned.

c. Collocated MMLS. Report coordinates of pseudo runway threshold. Report a description of markers used for NCU updating and suitability determination of those markers for use without the Television Positioning System."

13. MLS Data Word Continuation Sheet Instructions.

a. Fields 1, 2, and 4. Complete as shown in Chapter 2, Paragraph 12.

b. Data Word Fields. Fill in the Received Data Word information in the appropriate blocks.

c. MLS Misc Fields. Enter transmit channels and designed procedural azimuth, as indicated.

FLIGHT INSPECTION REPORT—MICROWAVE LANDING SYSTEM
FIGURE 1. FAA FORM 8240-16

FLIGHT INSPECTION REPORT—MICROWAVE LANDING SYSTEM												REVIEW INITIALS	
1. LOCATION:												2. IDENT:	
3. COMMON SYSTEM:						4. DATE(S) OF INSPECTION:						5. OWNER:	
6. TYPE OF INSPECTION						SITE EVALUATION		PERIODIC		SPECIAL			
						COMMISSIONING		SURVEILLANCE		INCOMPLETE			
7. RUNWAY NO:		8. FACILITY INSPECTED		FRONT AZIMUTH		ELEVATION		LIGHTING SYSTEM					
				BACK AZIMUTH		D M E							
9. AZIMUTH													
FRONT AZIMUTH						AZ. CRS. BRG:		BACK AZIMUTH					
TX 1			TX 2			BAZ. CRS. BRG:		TX 1			TX 2		
OT	INITIAL	FINAL	OT	INITIAL	FINAL	CATEGORY:		OT	INITIAL	FINAL	OT	INITIAL	FINAL
						MCE							
						PFE							
						PFN							
						CMN							
						OCI							
						CLEARANCE							
						BASIC DATA WORDS							
						AUX DATA WORDS							
						PROP. GUIDANCE - LEFT							
						PROP. GUIDANCE - RIGHT							
						IDENTIFICATION							
						USABLE DISTANCE							
						MONITOR							
						MCE - L. REF							
						PFE L. ALIGN							
						MCE - R. REF							
						PFE R. ALIGN							
ZONE 4						10. RUNWAY AZIMUTH		ZONE 5					
						PFE							
						PFN							
						CMN							
11. ELEVATION												12. GENERAL	
TX 1			TX 2			MGP:					SAT	UNSAT	
OT	INITIAL	FINAL	OT	INITIAL	FINAL	CATEGORY:		DME					
						ELEVATION ANGLE		LIGHTING SYSTEMS					
						PFE		SIAP(S) VERIFIED					
						PFN		13. FACILITY STATUS					
						CMN				AZ	ELEV	BAZ	
						OCI		UNRESTRICTED					
						BELOW MGP GUIDANCE		RESTRICTED					
						USABLE DISTANCE		UNUSABLE					
						MONITOR		14. NOTAM's:					
						EL. ANGLE - H. REF							
						PFE - H. ANGLE							
						EL. ANGLE - L. REF							
						PFE - L. ANGLE							
15. REMARKS:													
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO.:			
FIO:													

FAA FORM 8240 - 16 (3/2001) (FORMFLOW) (Supersedes Previous Edition)

FLIGHT INSPECTION REPORT—MLS COMMISSIONING DATA WORDS
FIGURE 2. FAA FORM 8240-16-1

PAGE		OF	PAGES
FLIGHT INSPECTION REPORT-MLS COMMISSIONING DATA WORDS			REVIEW INITIALS
1. LOCATION:			2. IDENT:
3. FACILITY TYPE:		4. DATE(S) OF INSPECTION:	
MLS BASIC WORD 1 (EXAMPLE)			
F DIS	200 MTR		
AZ PROP COV	-40 TO + 40 DEG		
CLEARANCE SIGNAL TYPE	SB		
MLS BASIC WORD 2 (EXAMPLE)			
MIN GLIDE PATH	3.0 DEG		
STATUS: AZ	NORMAL		
EL	NORMAL		
BZ	OFF/TEST		
DME	FA, STD 1 AVAIL		
MLS BASIC WORD 3, 4 & 6 (EXAMPLE)			
AZ BEAMWIDTH	3.0 DEG		
EL BEAMWIDTH	2.0 DEG		
DME DISTANCE	0.0 MTR		
AZ ZERO-DEG PLANE	173 DEG		
BZ ZERO-DEG PLANE	353 DEG		
GND EQUIP IDENT			
MLS AUXA WORD 1 (EXAMPLE)			
AZ ANTENNA OFFSET	-89 MTR		
AZ TO DATUM PT DIST	6210 MTR		
AZ TO DATUM HEIGHT	0 MTR		
AZ ANT/RUNWAY ALIGN	0.00 DEG		
AZ ANT COORDINATE	CONICAL/PLANAR		
AZ ANT HEIGHT	4 MTR		
MLS AUXA WORD 2 (EXAMPLE)			
EL ANTENNA OFFSET	-91 MTR		
THRESHOLD TO DATUM POINT	233 MTR		
EL ANTENNA HEIGHT	5.5 MTR		
DATUM POINT ELEVATION	387 MTR		
THRESHOLD HEIGHT	0.7 MTR		
MLS AUXA WORD 3 (EXAMPLE)			
DME OFFSET	-89 MTR		
DME TO DATUM POINT	0 MTR		
DME ANTENNA HEIGHT	5 MTR		
RUNWAY STOP END DIST	673 MTR		
MLS MISC			
CHANNEL/FREQ			
DESIGNED PROCEDURAL AZIMUTH			
DME CHANNEL			

FAA FORM 8240 - 16-1 (4/2000) (FORMFLOW)

APPENDIX 17. FLIGHT INSPECTION REPORT - RNAV
FAA FORM 8240-17

This report shall be used for reporting all site, commissioning, periodic, special, and other inspections. Record the following information:

- a. Field 1 - Location.** Complete as shown in Chapter 2, Paragraph 12. For point in space procedures, enter the airport name (if specified), city, and state as identified on the PC form. For routes, leave blank. For a DP or STAR, enter the primary airport name.
- b. Field 2 - Identification (Ident).** For an approach, enter the airport identifier. If the procedure is to a point in space, not to a designated airport, enter the airport identifier assigned to the procedure by the National Flight Data Center (NFDC). If no ident is assigned, leave blank. For routes, enter route name, i.e., Q501, etc. For a DP or STAR, enter the computer code listed on the PC form, i.e., computer code IDALE2.IDALE, enter "IDALE2".
- c. Field 3 - Ctrl Number.** Enter the GPS number listed on the PC form of the procedure package. Leave blank if a GPS number is not listed on the PC form of the procedure package.
- d. Field 4 - Date/ Dates of Inspection.** Complete as shown in Chapter 2, Paragraph 12.
- e. Field 5 - Owner.** Complete as shown in Chapter 2, Paragraph 12.
- f. Field 6 - Type of Inspection.** Complete as show in Chapter 2, Paragraph 12.
- g. Field 7 - Procedure Type.** Indicate the type of RNAV inspected by entering one of the following abbreviations:

DP	RNAV Departure Procedure
GPS PS	GPS Point in Space
LPV	Wide Area Augmentation System
RNAV	Lateral Navigation
RNAV/ VNAV	Lateral Navigation/ Vertical Navigation
RNP	Required Navigation Performance
Route	Airway or Off-Airway En Route Procedure
SID	Standard Instrument Departure
STAR	Standard Terminal Arrival Route
Other	

If "Other" is entered, indicate component inspected in Remarks.

- h. Field 8 - Procedure Name.** Enter procedure name (i.e., RNAV (GPS) Rwy 19R, AACES RNAV TWO, Q505, Bismark 1, etc.)
- i. Field 9 - RNP.** Enter the most critical RNP value for the procedure. When not specified, leave blank.
- j. Field 10. Procedure Modified.** Enter a "Yes" in this field when changes to a SIAP have been made during the inspection. Include a comment in Remarks to indicate the specific change. Enter a "No" in this field if no changes have been made to a SIAP during the inspection.
- k. Field 11. ARINC 424 Coding.** ARINC 424 coding meets the intended ground track of the procedure.
- l. Field 12 - Runways.** If applicable, enter the runway(s) served by the procedure. If the procedure serves more than one airport, enter the runway(s) of the primary airport. Enter additional airport names and runways in Remarks. If the approach is not to a specific runway, leave blank.

m. Field 13 – RAIM. RAIM availability, place an “X” in the appropriate box.

n. Field 14 - WAAS HPL (For RNAV WAAS LPV). Enter the largest received value (in meters) in the Final Approach Segment (FAS).

o. Field 15 – WAAS VPL (For RNAV WAAS LPV). Enter the largest received value (in meters) in the FAS.

p. Field 16 – GEO SNR (For RNAV WAAS LPV). Enter the lowest value received in db(s) in the FAS.

q. Field 17 – SIAP. Initial Approach Waypoint (IAWP), Intermediate Waypoint (IWP), Final Approach Waypoint (FAWP), Missed Approach Waypoint (MAWP), Missed Approach Turning Waypoint (MATWP), and Missed Approach Holding Waypoint (MAHWP). Each waypoint shall be reported when inspected.

(1) Waypoint Name – Enter waypoint name. When a waypoint is identified by the latitude/ longitude of a facility (i.e., XYZ VDME), enter the ident of the facility as the waypoint name.

(2) SAT/ UNSAT - If the data accuracy is satisfactory at the waypoint, place an “X” in the “SAT” space. If unsatisfactory, place an “X” in the “UNSAT” space and explain in Remarks.

(3) FAS Vertical Path Angle – Enter the commissioned vertical path angle for the FAS. For LNAV only approaches, leave blank.

r. Field 18 – Route, SID, STAR, and DP

(1) Waypoint Name – Enter waypoint name. When a waypoint is identified by the latitude/ longitude of a facility (i.e., XYZ VDME), enter the ident of the facility as the waypoint name.

(2) SAT/ UNSAT – If the data accuracy is satisfactory at the waypoint, enter an “X” in the “SAT” space. If unsatisfactory, enter an “X” in the “UNSAT” space and explain in Remarks.

s. Field 19 – DME Facilities Supporting Procedure. Enter the ident of each DME recorded. Enter additional facilities in Remarks.

t. Field 20 – Procedure Evaluation

(1) Human Factors Cockpit Workload. Complete using Order 8200.1, Paragraph 214.43 as a guideline. Place an “X” in the appropriate box. Explain unsatisfactory conditions in Remarks.

(2) Obstacle Verification. Place an “X” in the appropriate box. Explain unsatisfactory conditions in Remarks.

(3) Communications. Place an “X” in the appropriate box. Explain unsatisfactory conditions in Remarks.

(4) Lighting Systems. Place an “X” in the appropriate box. Explain unsatisfactory conditions in Remarks.

(5) Procedure Flyability. Place an “X” in the appropriate box. Explain unsatisfactory conditions in Remarks.

u. Field 21 - Remarks. Complete as shown in Chapter 3, Paragraph 21. If applicable, enter the reimbursable agreement number and owner name. When a flight check is accomplished for DME facilities supporting a procedure, enter the following remark: "Facilities identified by RNAV-PRO were evaluated for signal strength and accuracy. This does not constitute approval for use of DME/ DME".

v. NOTAM's. Complete as shown in Chapter 3, Paragraph 21.

APPENDIX 17. FLIGHT INSPECTION REPORT – RNAV
FAA FORM 8240-17

FIGURE 1. FAA FORM 8240-17

FLIGHT INSPECTION REPORT-- RNAV												REVIEW INITIALS	
1. LOCATION:												2. IDENT:	
3. CTRL NUMBER:				4. DATE(S) OF INSPECTION:						5. OWNER:			
6. TYPE OF INSPECTION				COMMISSIONING		SURVEILLANCE		INCOMPLETE					
				PERIODIC		SPECIAL							
7. PROCEDURE TYPE:				8. PROCEDURE NAME:						9. RNP:			
10. PROC MODIFIED		YES	NO	11. ARINC 424 CODING		SAT	UNSAT	12. RWY(S):					
13. RAIM		SAT	UNSAT	14. WAAS HPL:			15. WAAS VPL:			16. GEO SNR:			
17. SIAP													
WAYPOINT NAME				SAT	UNSAT	WAYPOINT NAME				SAT	UNSAT		
IAWP						MATWP							
IAWP						MAHWP							
IAWP						WP							
IAWP						WP							
IWP						WP							
FAWP						WP							
MAWP						WP							
MATWP						WP							
FAS VERTICAL PATH ANGLE:													
18. ROUTE - SID - STAR - DP													
WAYPOINT NAME				SAT	UNSAT	WAYPOINT NAME				SAT	UNSAT		
WP						WP							
WP						WP							
WP						WP							
WP						WP							
WP						WP							
WP						WP							
WP						WP							
WP						WP							
19. DME FACILITIES SUPPORTING PROCEDURE						20. PROCEDURE EVALUATION							
DME		DME		HUMAN FACTORS						SAT	UNSAT		
DME		DME		OBSTACLE VERIFICATION									
DME		DME		COMMUNICATIONS									
DME		DME		LIGHTING SYSTEMS									
DME		DME		PROCEDURE FLYABILITY									
21. REMARKS:													
NOTAMS:													
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO:			
FIFO:													

FAA FORM 8240 - 17 (03/2003) (FORMFLOW) (Supersedes previous edition)

Date Completed:

APPENDIX 18. FLIGHT INSPECTION REPORT - GFIS WORKSHEET,
FAA FORM 8240-18

This form provides a means to document the GPS segments that were evaluated and the filename of the final approach segment that is required to be recorded to disk. It shall be used on all GFIS flight inspection evaluations and will be retained in the facility folder along with the corresponding computer floppy disk.

- a. **Field 1: Location.** Complete as shown in Chapter 2, Paragraph 12.
- b. **Field 2: Identification (Ident).** Enter the airport identifier.
- c. **Field 3: GPS Ctrl Number.** Enter the GPS control number listed on the PC form of the procedure package.
- d. **Field 4 - 6:** Complete as shown in Chapter 2, Paragraph 12.
- e. **Field 7: Ground Station Coordinates.** Enter the coordinates of the GFIS ground transceiver, as viewed on the GFIS Position Update Control page, after initializing to a ground station benchmark or aircraft station fix.
- f. **Field 8: Waypoint Data**

(1) **SIAP/SEG.** Dissect the GPS flight procedure into segments to be flown. Name each segment in the following format, i.e., RW0410 where RW is the fixed abbreviation for runway, followed by the two-digit runway number and ending with the sequential segment numbers assigned by the technician. Ensure the FAWP and the MAWP are properly designated to allow the software to calculate waypoint displacement errors. Optionally, you may designate the last two waypoints in any segment as the FAFWP and the MAPWP respectively when entering the coordinate data on page 3 (GPS Flight Plan Maintenance) of the NAV Test Control Page. This will provide a calculated WPDE for these waypoints and automatically end the profile at the MAP designated waypoint. The above example refers to runway 4, segment number 10.

- (2) **WPT Start.** Enter the starting waypoint of the segment evaluated.
- (3) **WPT End.** Enter the ending waypoint of the segment evaluated.
- (4) **FAF Name & WPDE.** - Enter the 5-character name of the FAWP, followed by the calculated waypoint displacement error shown on the NAV Test Control Page.
- (5) **MAP Name & WPDE.** Enter the 5-character name of the MAWP, followed by the calculated waypoint displacement error shown on the NAV Test Control Page.
- (6) **Filename Sequence.** Enter the sequence number (last three characters of the filename) that applies to the segment flown.

(7) **Segment Notes.** Enter any additional information that may be useful to interpreting the results of the flight inspection of that segment.

- g. **Field 9: Remarks.** Enter as appropriate.

[illegible]

APPENDIX 19. FLIGHT INSPECTION REPORT--ENDFIRE GLIDE SLOPE
TRANSVERSE STRUCTURE PLOT, FAA FORM 8204-19

FAA Form 8240-19 will be used to plot the glide slope transverse structure on commissioning or other checks which are used as baseline data for later checks.

1. **Fields 1 - 3.** Complete as shown in Chapter 2, Paragraph 12.
2. **Field 4 - ANT TYPE.** Refer to Appendix 22, Remarks section. Current applicable codes are ED, EH, and EU.
3. **Field 5 - SITE ELEV.** Enter the site elevation in feet above Mean Sea Level (MSL).
4. **Field 6 - TX.** Identify the transmitter number for each plot (e.g., 1 or 2).
5. **Field 7 - CFG.** Enter the configuration of both the course and clearance transmitters, using the codes in Appendix 7, Paragraph 11(2) (e.g., Course Normal and Clearance Power Reduced would be entered as N/P). Use "OFF" as an additional code. Do not use Code "T" on this form.
6. **Field 8 - ALT.** Enter the altitude used, divided by 100, during each evaluation that is plotted (e.g., 2,500' MSL would be 25).
7. **Field 9 - RADIUS.** Enter the radius in nautical miles. The distance shall be referenced to localizer centerline abeam the glide slope.
8. **Field 10 - -FLT DIRECTION.** Enter the flight direction (CW or CCW) of the run.
9. **Field 11 - GS WIDTH.** Enter the normal width of the glide slope as measured on a level run.
10. **Field 12 - GLIDE SLOPE ANGLE.** Enter the actual angle measured on an ILS-3.
11. **Field 13.** Plot the glide slope deflection to 12° each side of localizer centerline in half-degree increments. Average through any short-term (less than one second) variations in the signal. Use the value found on the localizer centerline as the Zero Reference Baseline (Zero Ref Baseline). Determine and plot the Glide Slope crosspointer deflection values to this zero reference. For example, at localizer centerline, the received signal is 10 μ A of 90Hz, and at 3.5° off course, the received value is 15 μ A of 150 Hz; plotted values would be 0 at centerline and 25 μ A of 150 Hz at 3.5°. Additionally, draw dashed vertical lines corresponding to the localizer 150 μ A half-width points on the transverse structure recordings and plot the glide slope at these points. Connect the plotted data points with a solid line.
12. **Field 14 - REMARKS.** Enter any information needed to clarify entries in any field.
13. **GENERAL.** Enter FIFO, technician identification/signature, and aircraft number as instructed in Chapter 2, Paragraphs 12j, k, and l.

FLIGHT INSPECTION REPORT—ENDFIRE GLIDE SLOPE TRANSVERSE STRUCTURE PLOT
FIGURE 1. FAA FORM 8240-19

PAGE OF PAGES

FLIGHT INSPECTION REPORT-- TRANSVERSE-STRUCTURE PLOT												
1. LOCATION:										2. IDENT:		
3. DATE(S) OF INSPECTION:							4. ANT TYPE:			5. SITE ELEV:		
6. TX:		7. CFG:		8. ALT:		9. RADIUS:		10. FLT DIRECT:		11. GS WIDTH:		12. GS ANGLE:
<div style="display: flex; justify-content: space-between; font-weight: bold; font-size: 0.9em;"> 13. LOCALIZER - 90 Hz DEGREES FROM LOC-CL ABEAM GOP LOCALIZER - 150 Hz </div> <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; font-size: 0.8em; margin-right: 5px;"> MICROAMPERES (zero ref baseline) </div> </div>												
6. TX:		7. CFG:		8. ALT:		9. RADIUS:		10. FLT DIRECT:		11. GS WIDTH:		12. GS ANGLE:
<div style="display: flex; justify-content: space-between; font-weight: bold; font-size: 0.9em;"> 13. LOCALIZER - 90 Hz DEGREES FROM LOC-CL ABEAM GOP LOCALIZER - 150 Hz </div> <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; font-size: 0.8em; margin-right: 5px;"> MICROAMPERES (zero ref baseline) </div> </div>												
14. REMARKS: (Draw vertical lines at Localizer 150µA-points.)												
REGION:		FLIGHT INSPECTOR'S SIGNATURE:				TECHNICIAN'S SIGNATURE:				AIRCRAFT NO :		
FIO:												

FAA FORM 8240 - 19 (01/2003) (FORMFLOW)

**APPENDICES 20 – 21
RESERVED**

**APPENDIX 22. INSTRUCTIONS FOR COMPLETION OF
FACILITY DATA, FAA FORM 8240-22**

1. Purpose and Distribution. Information required on this form is used to prepare computer programs for FAA flight inspection aircraft and in the development of terminal instrument procedures. This data must be kept valid and current. Submit a new facility data form when any of the information is changed (e.g., frequency change, antenna placement, equipment change, etc.). Do not report temporary changes in facility restrictions or inoperative components. Forward the original copy of FAA Form 8240-22 to the Flight Inspection Technical Support Branch, AVN-210, Post Office Box 25082, Oklahoma City, Oklahoma 73125.

2. Scope of the Form. Use a separate form for each facility and one for each precision approach except as follows:

a. MLS/TLS/ILS. Report the localizer and glidepath of an ILS system on the same report form and report the azimuth and elevation of an MLS system on the same report form. When reporting an MLS facility, draw a line through all ILS references on the report form. When reporting on a Transponder Landing System (TLS), report the localizer and glide slope on the same form; use a separate form for each separate runway or distinct flight procedure.

b. MLS/ILS Supporting NAVAID's. Report marker beacons, compass locators, and collocated DME data with the MLS/ILS data.

c. VORTAC and VOR/DME. DME and azimuth functions of VORTAC and VOR/DME facilities may be reported together if the antennas are collocated. Collocation of antennas, for facility data reporting only, is defined as 10 feet or less. (See instructions for completing block 19.)

d. PAR and ASR. PAR and ASR facilities operating from the same unit may be reported together. If the PAR serves more than one runway, complete a separate form for each runway served by the PAR. Report the ASR facility on the data sheet containing the PAR serving the primary instrument runway or report the ASR on a separate form.

e. Control Towers/Communications Sites. Forms will not be required for control towers or transmitter/receiver sites unless they contain a direction finding (DF) or ultra high frequency (UHF) beacon.

3. Information not Applicable to the NAVAID. When completing a required section, leave any block blank when not applicable.

4. Decimal Accuracy. When using trigonometry functions for computations, report values to nearest hundredth. For other accuracies, see the reporting instructions by block.

5. True Bearing. References to true bearing imply true azimuth in degrees and hundredths of degrees.

6. Geographic Coordinates. All latitude and longitude coordinates shall be referenced to NAD 1983 or World Geodetic System (WGS) 1984, depending on location. The reference system used shall be specified with each set of coordinates. When entering coordinates, precede the latitude with "N" or "S" and the longitude with "E" or "W".

7. Displaced Threshold. When preparing a form on a facility which supports a runway having a displaced threshold, enter all data pertaining to runway threshold in reference to the beginning of the actual landing area of the runway. Displaced thresholds, due to temporary (less than 90-day) construction projects or runway repairs, should not be reported unless a precision approach touchdown point has been or is being changed.

8. Completing the Sections.

a. Section I. Complete section I for all facilities located on an airport. For facilities not located on an airport, complete only blocks 1, 5, and 6.

b. Section II. Complete section II on all facilities. When commissioning data is available, fill out all blocks; otherwise, only those items detailing information about the equipment and its location need to be furnished to the flight inspection activity prior to the commissioning flight check.

c. Sections III, IV, V, and VI. In addition to completing sections I and II as specified above, complete the following sections according to type of facility: PAR, sections IV and VI; MLS elevation or ILS glide slope, section IV; MLS azimuth or ILS localizer-type, section III; blocks 72 and 73 of section IV; ASR, ARSR, SECRA, section VI; and VORTAC, VOR, TACAN, VOR/DME, section V. Complete section VI as specified.

d. Visual Glide Slope Indicator. For visual glide slope indicator (VGSI), complete all of section I, complete blocks 8, 10, 13, 14, 16 (enter - see remarks), 18, 24, 25, 30, 31, 32, 34, 35 (TCH), 36, and 37 of section II, and blocks 60, 61, 62, 63, 72, and 73 of section IV. For precision approach path indicator (PAPI) and pulsating visual glide slope indicator (PVGSI), in addition to the above blocks, enter distance from threshold to runway centerline abeam the light bar/box in block 60.

REPORTING INSTRUCTIONS BY BLOCK

SECTION I. AIRPORT/FACILITY

1. Location. Enter the city and state or country where the facility is located.

2. International Civil Aviation Organization (ICAO) Identification (Ident). Enter the ICAO airport designator. In the contiguous United States, this is "K" plus the airport identifier (e.g., KOKC).

3. Magnetic Variation (Mag Var)/Epoch Year (Yr). Enter the magnetic variation of record for the airport reference point and the epoch year. If unknown, contact the National Flight Procedures Office, AVN-160.

4. Airport Reference Point. Enter the latitude and longitude of the airport reference point in degrees, minutes, and seconds to the nearest hundredth of a second.

5. Airport/Facility Name. Enter the facility name and airport name if facility is located on airport. If the facility does not have a name, enter the associated airport name or name of the military installation.

6. Owner. Indicate the actual owner of the facility (e.g., FAA, U.S. Air Force, or U.S. Navy). If the facility is owned by a foreign country and being flight checked by a U.S. agency, indicate the country and agency (e.g., Thailand, DOA).

7. Field Elevation (MSL). Enter the official airport elevation to the nearest foot. If elevation is below sea level, enter a minus sign preceding the elevation (e. g., -23 feet).

SECTION II. GENERAL

8. Type Facility. Indicate the type facility(ies) being reported on (e.g., VORTAC, glide slope, simplified directional facility (SDF), etc.). If DME is located at the ILS, report it as an ILS/DME. If DME is located at an MLS, report it as an MLS/DME. If DME is located at an NDB, report it as NDB/DME.

9. Frequency (Freq)/Channel. Indicate the published frequency and/or channel of the facility(ies). Leave blank when reporting on an air traffic control or communications facility. If a DME is collocated with the localizer, glide slope, or NDB, report the DME channel with its associated facility (e.g., LOC 109.9/36X, if collocated with the MLS, report as AZ CH 602/5061.6; DME 048Y).

10. Identification. Enter the identifier. When reporting on a glide slope, enter the identifier of the associated localizer. Do not enter the prefix "I" for ILS or "M" used with the MLS systems. Where more than one ASR is in operation at the same location or at an associated location, these equipments will be identified with the letters A, B, C, etc., following the identification (e.g., NQIB). These alpha codes shall be the same as those used to accomplish the daily flight log. For ARSR facilities, use identifier of the controlling ARTCC or military installation plus an alpha subcode unique to the particular ARSR. Light systems serving runways having an ILS, LOC, MLS, LDA, or SDF will use the identification of the azimuth system. For runways not served by an azimuth-type facility, use the airport identification plus an alpha character for all lighting serving a particular runway.

11. Class/Category. Enter the frequency-protected service volume for VOR, VORTAC, VOR/DME, or TACAN (T, H, L), the MLS or ILS performance category (category I, II, or III), or NDB class (MH, H, HH, Compass Locator). Leave blank if not applicable.

12. Common System. Complete this block by entering an "X" in the "Yes" block if the facility is depicted for public use on any instrument approach procedure; if not, enter an "X" in the "No" block.

13. Commissioned Date. Enter the month, day, and year the facility was commissioned (e.g., July 6, 1989, shall be entered as 7/6/89).

14. Equipment Type. For MLS or ILS facilities, enter the equipment type code from block 84, paragraph 84m of this appendix. For other facilities, enter the nomenclature of the equipment. In cases where more than one facility of the same type (except ILS or MLS) is installed at an airport, identify specific equipment by the use of serial numbers or alpha symbols (e.g., TPN-8, SN-13 or MPN-13A, SN 154). For VORTAC, VOR, VOR/DME, and TACAN facilities, enter "2ND-GEN," if appropriate. Leave blank when reporting communications facilities which have numerous types/nomenclature of equipment.

15. Type Antenna. Enter the antenna nomenclature and principle of operation (e.g., GRA-121, fixed dipole, rotating parasitics). For MLS or ILS facilities, enter the antenna type code from block 84, paragraph 84m, of this appendix. For MLS, also enter the number of degrees of proportional guidance of the azimuth system (e.g., type 1/40 degrees). Leave blank for radar or communications facilities.

16. Antenna Elevation (Elev). Enter the elevation of the antenna base in feet, mean sea level (MSL) (to the nearest tenth, if available). If elevation is below sea level, precede the value by a minus sign (e.g., -15 feet). For ILS glide slope, use ground elevation, not the elevation of the pad; for an MLS, use the phase center of the elevation antenna; for waveguide glide slope, use the elevation of the midpoint of the antenna mast.

17. Antenna Height - FT AGL. For MLS, enter the height of the elevation phase center of the antenna above the reference datum elevation (i.e., reference datum elevation is the point on runway centerline ABEAM the elevation phase center antenna).

18. Control Station and Frequency. Enter the voice call sign of the station normally having remote control or monitor capability of a facility. Also, enter the primary frequency on which to establish contact. For VGSI systems, enter the agency/facility which has on/off control; if automatic control, so indicate.

19. Antenna Location. Enter the geographic coordinates measured at the center of the antenna array in the following manner: Report all antenna locations, except communications facilities, in accuracies equivalent to two decimal portions of arc-seconds. This means that the coordinates will be reported as XX degrees, XX minutes, XX.XX seconds. Enter "N" or "S" to show latitude and "E" or "W" to show longitude (e.g., N31, 16', 22.22" and E31, 16', 22.22"). For communications facilities with several antennas, use coordinates from the center of the transmitter antenna group. When reporting on combined facilities (a VORTAC, VOR/DME, etc.), with antennas which are not collocated, enter "see block 84" in this block and enter the separate antenna coordinates in block 84. For MLS or ILS facilities, enter the coordinates in blocks 38 and 55. For TLS facilities, use the coordinates of the "apparent antenna" positions for Blocks 38 and 55. Enter actual coordinates of the sensor and radiating antennas in Remarks (Block 84).

20. Primary Power. Enter an "X" in the appropriate box.

21. Standby Power. Enter an "X" in the appropriate box.

22. Standby Equipment (Equip). Enter an "X" in appropriate box(es) and, if more than one box is marked, enter the component on the line above the box to identify the component to which the "X" applies (e.g., VOR has dual transmitters and TACAN has single transponder: Enter an "X" in "Yes" box and "VOR" on the line above the "Yes" box; enter an "X" in the "No" box and "TACAN" on the line above the "No" box). If additional space is needed, continue in block 84.

23. Monitor. Enter an "X" in appropriate box(es).

24. Runway Number. (Complete this block for ILS, MLS, PAR, VGSI, and localizer-type facilities.) Identify the primary instrument runway served by the facility. When more than one runway is served by a precision approach aid (such as a PAR), make a separate facility data form for each runway. For ASR or DF equipment, leave blank and complete block 83; for VOR, VORTAC, VOR/DME, or TACAN, leave blank.

25. Runway True Bearing. Enter the true bearing of the runway to the nearest hundredth. For offset azimuth facilities, enter the course azimuth separately (see block 46).

26. Magnetic (Mag) Variation/Year. Enter the magnetic variation listed in AVN-210 files and the epoch year for navigation aids (e.g., E10 degrees, 1985). If the magnetic variation is not on file, contact AVN-160 to determine the magnetic variation and epoch year.

27. Voice. If the facility has remote voice capability, indicate where the microphone is located and the type of service (e.g., Automatic Terminal Information Service (ATIS), from Jackson, MS (JAN), Flight Service Station (FSS), enter "ATIS/JAN FSS").

28. Automated Flight Inspection System (AFIS) Radial. Enter (to the nearest degree) the AFIS reference radial.

29. Power Output. Indicate the transmitter power output (peak power for pulsed equipment and average power for nonpulsed transmitters) in watts, kilowatts, or db, measured at the transmitter.

30. Runway Dimensions. Enter (to the nearest foot) in the spaces provided, the length, width, and landing length of the primary instrument runway served by the facility. Leave blank for nonprecision facilities.

31. Displaced Threshold (Th). Enter an "X" in appropriate box. If the runway threshold is displaced, enter the amount of displacement (to the nearest foot) in the space provided. Leave blank for nonprecision facilities.

32. Commissioned. Enter the commissioned localizer course width and/or commissioned ILS/MLS/PAR/VGSI glidepath angle, to the nearest hundredth of a degree.

33. ASR Vertical (Vert) Coverage and Operational Requirements (Req). Enter the radial used to determine vertical coverage and define the operational requirements for the ASR. If more space is needed to define operational requirements, use Block 84.

34. Threshold Elevation (Elev). (Complete this block for ILS, localizer, SDF, LDA, MLS, PAR, VGSI facilities only). Enter the MSL altitude (to the nearest tenth of a foot) of the threshold (or displaced threshold, if applicable) of the instrument runway supported by the facility. If threshold elevation is below sea level, precede the elevation by a minus sign.

35. Threshold Crossing Height (TCH). Enter (in feet to the nearest hundredth) the value derived from multiplying the GPI distance (Block 63) and the tangent of the commissioned angle (Block 32) in the TCH space provided. Exception: If the TCH is determined by actual flight inspection measurements (Order 8240.47, Determination of ILS Glidepath Angle, Reference Datum Heights, and Ground Point of Intercept), enter the flight inspection value in the RDH space and disregard the GPI calculation for TCH. Enter an asterisk in Block 35 and enter in Block 84, "*Block 35, RDH, is flight inspection derived." For VGSI TCH computations, use the distance to threshold from runway reference point (RRP). VASI RRP is the point half way between the downwind and upwind light boxes. On single light bar systems, PAPI and PVGSI, the RRP is the point on the runway centerline abeam the light bar/box. To compute VGSI TCH, multiply the RRP distance by the tangent of the commissioned angle and subtract the difference between threshold elevation and RRP elevation. Formula for VGSI TCH: RRP distance x Tan of commissioned angle - [threshold elevation - RRP elevation]. Example: RRP distance = 949.0 ft; commissioned angle = 3.00°; threshold elevation = 1077.4 ft.; RRP elevation=1075.4 ft.

$$TCH = [949.0 \times \tan 3.00] - [1077.4 - 1075.4] = (949.0 \times .05241) - 2.0 = 49.73 - 2.0 = 47.73 \text{ ft.}$$

36. ILS/MLS/PAR/VGSI Angle Coincidence. Enter (to the nearest hundredth) the commissioned angle of each, if installed, for determination of angle coincidence.

37. Restricted. Enter an "X" in the appropriate box. If the facility has permanent restrictions assigned, enter an "X" in the "Yes" box and state "see block 84." In block 84, enter "Block 37. (quote restrictions verbatim and date of restriction)."

SECTION III. LOCALIZER DATA (ILS, SDF, LDA) OR MLS AZIMUTH

Complete this section only for an MLS azimuth or localizer-type facility. If reporting a MLS azimuth facility, draw a line through "Localizer Data (ILS, SDF, LDA) or" leaving only "MLS Azimuth."

38. Localizer/Azimuth Antenna Coordinates. Enter latitude and longitude as specified in Block 19.

39, 40, 41. Distance to Outer Marker (OM)/Middle Marker (MM)/Inner Marker (IM). Enter the distance in feet (to the nearest foot) and miles (to the nearest hundredth) from the center of the localizer or azimuth antenna array to the points indicated on runway centerline extended. If the antenna is offset from runway centerline, report distances as measured in a line parallel to runway centerline. If no markers exist, enter the distances to the FAF or checkpoints, using the appropriate azimuths.

42. Distance Inner Marker (IM) to Threshold (Th). Enter the distance (to the nearest foot) from the point on runway centerline extended abeam the marker to the displaced threshold or threshold.

43. Distance to Threshold (Th). Enter the distance (to the nearest foot) measured along the runway centerline from a point abeam the localizer or azimuth antenna to the displaced threshold or threshold.

44. Distance (Dist) to Stop End. Enter the distance (to the nearest foot) measured along the runway centerline from a point abeam the localizer or azimuth antenna to the stop end of the runway. An offset antenna inside the stop end, toward the threshold, will require the use of a minus sign preceding the distance value (e.g., offset stop end, -76 feet).

45. Usable Distance. Enter the maximum distance (to the nearest mile) at which coverage is checked at the maximum authorized altitude (MAA) (to the nearest foot) and the minimum reception altitude (MRA) (to the nearest foot). If the localizer or MLS azimuth has expanded service volume, enter "ESV" in the top right corner of the block and enter in block 84 the authorized "ESV" (see block 84e).

46. Offset Localizer (LOC) True Bearing. Enter the inbound true bearing of an offset MLS azimuth or localizer (to the nearest hundredth).

47. Localizer (LOC) Course Width (CW) Monitor. Enter (to the nearest hundredth) the localizer monitor limits (+ and - 17 percent of the commissioned course sector width shown in Block 32 for categories (CAT) I and II; + and - 10 percent for CAT III).

48. Localizer Course Tailored. Enter an "X" in the "Yes" box if the localizer course sector width is tailored. A tailored localizer course is designed to have a width of 700 feet at threshold; however, due to mathematical computations, etc., a tailored localizer course may be 700 feet + or - 5 feet at the threshold. Enter the commissioned sector course width (to the nearest foot) at the threshold (Th) in the space provided. Leave blank for MLS azimuth.

49. Back Course Usable Distance. Complete this block if the back course is advertised for use (complete the same as block 45). If the back course has an ESV, describe in Block 84.

50. Back Course (BC) True Bearing. Enter the inbound true bearing of the back course (to the nearest hundredth).

51. Distance to Centerline (C/L) Runway (Rwy) Abeam Glidepath Antenna (Ant). Enter the distance (to the nearest foot) measured along the runway centerline from the point abeam the glidepath or elevation antenna to the point abeam the localizer or azimuth antenna.

52. Direction Left or Right (L or R) and Distance Localizer (LOC) Offset from Runway (Rwy) Centerline (C/L). If the localizer/azimuth antenna is offset from the runway center, enter the distance it is offset (to the nearest foot). The direction (right or left) is determined by facing the runway at the approach end (e.g., right 275 feet means the center of the localizer/SDF/azimuth antenna array is 275 feet to the right of, and measured perpendicular to, the runway centerline). If the localizer/azimuth is on runway center, enter "C/L."

53. Front Course Checkpoint. Enter a description of and the distance (to the nearest tenth of a mile) to the checkpoint used to check localizer/azimuth course sector width or the FAF description (e.g., grain elevator/4.9 NM; FLOEE INT 15.6 DME; ELAIN INT/OM).

54. Back Course Checkpoint. Enter a description of and the distance (to the nearest tenth of a mile) to the checkpoint used to check localizer back course sector width (e.g., railroad and road/5.6 NM; GLH 5.9 DME). Leave blank when back course is not used.

SECTION IV. GLIDEPATH DATA (ILS, PAR, VGSI) OR MLS ELEVATION

Complete this section only if the facility is an MLS elevation, ILS glide slope, PAR, or visual glide slope indicator. If reporting an MLS elevation facility, draw a line through "Glidepath Data (ILS, PAR, VGSI) or," leaving only "MLS Elevation."

55. Glide Slope/Elevation Antenna Coordinates. Enter latitude and longitude as specified in Block 19.

56, 57, 58. Distance to Outer Marker (OM)/Middle Marker (MM)/Inner Marker (IM). Enter the distance (to the nearest foot) and miles (to the nearest hundredth) measured from a point on the runway centerline abeam the glide slope or elevation antenna to the point on runway centerline extended abeam the applicable marker or fix. If a fix is used in lieu of an outer marker, delete the "OM" and enter "FAF" (final approach fix) or "CKPT" (checkpoint) in Block 56; if the fix is not described in Block 53, describe the fix in Block 84.

NOTE: Distances entered in Blocks 56, 57, and 58 will be used to compute tapeline and earth curvature entries for Blocks 65, 66, and 67, respectively.

59. Threshold to Point (Pt) "C" Distance. Complete this entry for ILS and MLS only (optional). Report both feet and miles to the nearest hundredth. Compute distance as follows:

$$\left[\frac{100 + (\text{threshold elevation} - \text{elevation used to compute GPI in Block 63})}{\text{tangent of the commissioned angle}} \right] - \text{Distance to threshold in Block 60}$$

Example: Angle = 3.00°; threshold elevation = 855 ft.; runway elevation abeam glide slope = 850 ft; glide slope distance to threshold = 1200 ft.

$$\text{Then } \left[\frac{100 + (855 - 850)}{\tan 3.00^\circ} \right] - 1200 = \left[\frac{105}{0.05241} \right] - 1200 = 2003.52 - 1200 = 803.52 \text{ ft.}$$

60. Distance to Threshold (Th). For an ILS glide slope or MLS elevation, enter the distance (to the nearest foot and hundredth of a mile) measured along the runway centerline from a point abeam the glide slope/elevation antenna to the runway displaced threshold or threshold. For visual glide slope indicator systems, enter the distance from the RRP to the runway displaced threshold or threshold. For localizer/ azimuth antennas which are offset from runway centerline extended, additional procedural data is required. This procedural data shall be the distance from a point abeam the glide slope/elevation antenna (pseudo glide slope) to a point abeam the threshold (pseudo threshold) on the commissioned final approach course. To enter this additional procedural data, enter an asterisk in block 60; and in block 84, enter "*Procedural data: Distance pseudo G/P to pseudo AER = 1002'." Also, enter the latitude and longitude of the pseudo glidepath/elevation and pseudo threshold (e.g., pseudo G/P N41-09'-31.01" WO73-07'-46.14," pseudo AER N41-09'-24.28" WO73-07'-55.74").

61. Runway (Rwy) Elevation (Elev) Abeam Glide Slope (GS) Antenna. Enter the elevation (to the nearest tenth of a foot, if available) of the runway C/L abeam the ILS glide slope or MLS elevation antenna. For PAR facilities, leave blank. For VGSI installation, enter the runway C/L elevation at the RRP. Enter the corresponding coordinates in Block 84.

62. Touchdown Zone Elevation (TDZE) (MSL). Enter the elevation (to the nearest foot, if available) of the highest point of the first 3,000 feet of runway surface measured from the displaced threshold or threshold. Precede the MSL altitude with a minus sign if the TDZE elevation is below sea level.

63. Distance Threshold to Ground Point of Intercept (GPI). Enter the distance (to the nearest hundredth of a foot) from the displaced threshold or threshold to the GPI and the distance from the displaced threshold or threshold to the runway point of intercept (RPI) (e.g., ILS GPI 788.00, RPI 680.00; PAR GPI 1141.75; VGSI GPI 758.00, RRP (runway reference point) 660.00). To calculate the GPI distance, determine the height of the elevation/glidepath emanation point. This will be one of the following: elevation of the glide slope antenna site (Block 16); elevation of the midpoint of the waveguide glide slope antenna mast (Block 16); elevation of the MLS antenna phase center (Block 16); the runway elevation abeam the glide slope antenna (block 61); or a flight inspection derived value (Block 84). Enter in Blocks 71 and 84 the elevation used for GPI computations. From the preceding elevation selected, subtract the displaced threshold elevation or threshold elevation (Block 34).

NOTE: If the selected elevation is lower than the threshold elevation, the result is negative and vice versa.

Divide the result by the tangent of the commissioned angle (Block 36). Algebraically add the result to the "distance to Th" in feet (Block 60). The result is the GPI entry for this block. For a VGSI GPI computation, the distance to the threshold is from the RRP (Block 60). To compute RPI, use FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), Figure 129 or 129A. Substitute the elevation/glidepath emanation height used to compute GPI for the antenna elevation or runway crown elevation as shown in the figures.

64. Direction Left or Right (L or R) and Distance From Antenna to Runway (Rwy) Centerline (C/L). Complete this block for glide slope, MLS elevation, and PAR only. Looking from threshold down the runway, indicate if the ILS glide slope, MLS elevation, or PAR antenna is left or right of runway centerline and enter the precise perpendicular distance to runway centerline (to the nearest foot).

65, 66, 67. Altitude Over Outer Marker (OM) or Checkpoint (CK PT)/Middle Marker (MM)/Inner Marker (IM). Complete these fields for glide slope and MLS elevation facilities. Enter the tapeline altitude, earth's curvature value (optional), and altitude (all to the nearest hundredth) over the points indicated, based on the commissioned glidepath angle or MLS elevation angle.

a. Tapeline. To calculate tapeline, multiply the tangent of commissioned glidepath angle or MLS elevation angle by the distance in feet from commissioned final approach course abeam the glide slope/elevation antenna to the appropriate marker or FAF on the same final approach course.

b. Earth Curvature (EC). To calculate EC, use distance in nautical miles from commissioned final approach course abeam glidepath/elevation antenna to appropriate marker or FAF, squared, multiplied by .883.

c. MSL. To calculate MSL, add tapeline, earth curvature, and the elevation used to compute the GPI in Block 63.

68, 69. Distance (Dist) Outer Marker (OM)/Middle Marker (MM) to Threshold (Th). Enter the distance (to the nearest foot) from the point on runway centerline extended abeam the marker or FAF to the displaced threshold or threshold.

70. Glidepath/Elevation Monitor. Enter (to the nearest hundredth) the glidepath/ elevation monitor alarm points based on the commissioned angle and category, in accordance with Order 8200.1A, Paragraph 217.5. For MLS, draw a line through glidepath and complete with maximum and minimum allowable angles (e.g., angle (high) 3.1; angle (low) 2.9).

71. Elevation used to commission Glide Slope. Enter the elevation (to nearest tenth of a foot, if available) that was used to commission the glide slope (see Block 63).

72, 73. Type of Approach Lighting/Type of Runway Lighting. Enter the type of approach lighting available and the type of runway lighting available for the runway number in Block 24.

SECTION V. VOR, VOR/DME, VORTAC, TACAN, DME

Complete this section for VOR, VOR/DME, VORTAC, TACAN, or DME facilities only.

74. Reference Radial/Checkpoint Description. Enter the reference radial azimuth (to the nearest whole degree). Enter checkpoint azimuth (to the nearest tenth of a degree), the distance (to the nearest tenth of a mile), MSL altitude used to establish alignment over the checkpoint, and a description of checkpoint (e.g., reference radial 270°, checkpoint 270.1°/14.3 nm/2500'/bridge over highway). This information should be available from the commissioning flight inspection report. For AFIS reference radial, enter radial azimuth in whole degrees, the start and stop distances from the facility in miles, and the MSL altitude used (e.g., AFIS reference radial: 270°/15-25 nm/7500').

75. Theodolite Position. Enter the location of the theodolite in reference to the antenna when a theodolite is used to check the facility; if not required, leave blank.

76. Ground Receiver Checkpoints. Enter the airport name, radial, distance, and description of the checkpoints located on airports used to groundcheck airborne receivers.

77. Theodolite Reference Points. In normal circumstances, this block is not used and may be left blank. If needed, enter the precise azimuth and description of reference points used to visually align the theodolite.

78. Airborne Receiver Checkpoints. For each airborne receiver checkpoint, enter the radial, distance, altitude, and description of the airborne receiver checkpoint; if the checkpoint is on an airport, enter the airport names in the "Name" space.

SECTION VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF-Df, UHF-Df)

Complete Blocks 79, 80, 81, and 82 for radar facilities only.

79. Type Secondary. Enter the equipment type of the secondary radar and serial number, if needed.

80. Moving Target Indicator (MTI) Blind Speed. Enter the blind speed.

81. Video Mapping. Enter an "X" in the appropriate box.

82. Antenna Tilt. Enter antenna tilt in hundredths of a degree in the appropriate space. A variable tilt antenna can be remotely controlled.

83. Nonprecision Approaches. Enter airport name and runway served by the facility.

84. Remarks. If there is insufficient space in any block, complete the entry in this block and reference the block number. If more space is required for remarks, attach another FAA Form 8240-22 and use Block 84, "Remarks" only. Label the pages as "Page 1 of 2," "Page 2 of 2," etc. This space will also be used to enter any other pertinent data for which no space has been provided (e.g., displaced threshold coordinates (DISPL-AER)).

a. PAR. Enter the latitude, longitude, and elevation of the stop end (SER) of the runway centerline; the latitude and longitude of the approach end runway (AER) threshold centerline; latitude and longitude of displaced threshold (DISPL-AER); and the latitude and longitude of ground point of intercept (GPI).

b. Azimuth-Type Facility, MLS or ILS. Enter the latitude and longitude of the runway abeam the glide slope/elevation antenna phase center; the latitude and longitude and elevations of marker beacons, DME, and compass locators; the location identifier and frequency of compass locators; the latitude, longitude, and elevation of the SER; the latitude and longitude of the AER; and the latitude and longitude of DISPL-AER. For an offset localizer or MLS azimuth, enter the distance (in feet) from the AER that the approach course azimuth crosses runway centerline. Enter the area of the designed MLS clearance coverage of the antenna. If a localizer has dual frequencies, enter a remark to so indicate. Enter elevation used to compute GPI. If minor axis width of a marker is not optimum, enter actual marker width required and reason for special size.

c. Visual Glide Slope Indicator Systems.

(1) VASI. Enter the distance from threshold to each row of light boxes; the elevation of the runway crown abeam each row of light boxes; the aiming angle of each row of light boxes; the latitude, longitude, and elevation of SER and RRP; the latitude and longitude of the AER; and the latitude and longitude of DISPL-AER.

(2) PAPI and PVGSI. Enter the elevation of the runway crown abeam the light bar, latitude, longitude, and elevation of the SER, and the latitude and longitude of AER, RRP, and DISPL-AER.

d. VOT. Describe the reference point and any restrictions to VOT use. For area VOT's, list each airport served, whether it is to be used in the air or on the ground, and any restrictions that may exist (e.g., altitude restrictions, etc.).

e. Expanded Service Volume. Describe all authorized expanded service volumes by component, azimuth, distance, and MAA/MRA altitudes.

f. Standard Instrument Approach Procedure (SIAP). List all SIAP's that each facility supports. Include the airport name and state; SIAP description; and the amendment number if the SIAP is public, private, or military (e.g., Will Rogers World, OK, NDB rwy 35R, amdt 1, public). If an NDB supports an ILS or MLS procedure, identify the NDB's use (e.g., NDB used as a compass locator at outer marker (LOM) for "RGR" ILS approach, runway 35R).

g. NOTAM'S. Record all existing facility NOTAM's verbatim with date NOTAM was given to issuing agency. When a NOTAM is issued, changed, or canceled, notify AVN-210, using the data sheet transmittal option, or by sending a new FAA Form 8240-22 to AVN-210. A history log of all facility NOTAM's may be retained by the FIO's.

h. Region. Enter the 3-letter region designator of the FAA region in which the facility is located. For USAF owned facilities, also enter the USAF major command identifier.

i. FIO. Enter the 3-letter designator of the flight inspection office having primary responsibility for inspection of the facility.

j. Facility Identification (Ident) and Facility Type. Same as Blocks 10 and 8.

k. Date Prepared. Enter month, day, and year that facility data form was prepared.

l. Typed Name and Signature. Enter the name and the signature of the person who approved the data sheet for use (if applicable).

m. ILS/MLS Equipment Type and Antenna Type Codes.

LOCALIZER - ANTENNA TYPE

Standard 8 Loop	SL	
V-Ring 8 Element	V8	
V-Ring 14 Element	V4	
V-Ring 15 Element	V5	
Wave Guide	WG	
Traveling Wave	TW	
LDA	LD	
Twin T or "T" Type	TT	
Log Periodic	LP	
Capture Effect	CE	
Parabolic	PB	
N.E.R.A	NE	
4 Element Dipole	4D	
6 Element Dipole	6D	
TLS Yagi	YG	
Other	OT	(Specify in Remarks)
Modified Log Periodic (back course)	ML	

LOCALIZER/AZIMUTH EQUIPMENT TYPE

Standard	ST	(Other than solid state equipment)
AIL	AI	(Solid State equipment)
Aviation Systems, Inc.	AS	
Texas Instrument	TI	(Solid State equipment)
Wilcox	WL	(Solid State equipment)
Bendix/Allied Signal	BX	
Phillips	PL	
Thompson	TH	
Lorenz	LZ	
Hazeltine	HZ	
ANPC	TL	
Other	OT	(Specify in Remarks)

GLIDEPATH - ANTENNA TYPE

Capture Effect	CE	
Sideband Reference	SB	
Modified Sideband Reference	MR	
Null Reference	NR	
Wave Guide	WG	
N.E.R.A.	NE	(Norwegian-made antenna used with WL equipment)
Endfire Standard (105)	ED	
Endfire Short (106)	EH	
Endfire – Upslope Version	EU	
TLS Yagi	YG	
Other	OT	(Specify in Remarks)

GLIDEPATH/ELEVATION EQUIPMENT TYPE

Standard	ST	(Other than Solid State equipment)
AIL	AI	
Aviation Systems, Inc.	AS	
Texas Instrument	TI	
Wilcox	WL	
Bendix/Allied Signal	BX	
Thompson	TH	
Lorenz	LZ	
Hazeltine	HZ	
ANPC	TL	
Other	OT	(Specify in Remarks)

MICROWAVE LANDING SYSTEM (MLS) ANTENNA OPTIONS

TYPE	AZIMUTH GUIDANCE		ELEVATION GUIDANCE	
	BEAM WIDTH	SCAN ANGLE	BEAM WIDTH	SCAN ANGLE
Type I	2°	±40°	1.5°	0.9° to 15°
Type II	2°	±40°	1°	0.9° to 15°
Type III	1°	±40°	1.5°	0.9° to 15°
Type IV	1°	±40°	1°	0.9° to 15°
Type V	1°	±10°	1°	0.9° to 15°
Type VI	1°	±60°	1°	0.9° to 15°
Other (Specify in Remarks)				

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA

FIGURE 1. FAA FORM 8240-22

PAGE 1 of 2 PAGES

FACILITY DATA										
I. AIRPORT / FACILITY										
1. LOCATION			2. ICAO IDENT		3. MAG VAR / YR MAG VAR: EPOCH YR:		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: _____ LONGITUDE: _____			
5. AIRPORT / FACILITY NAME			6. OWNER		7. FIELD ELEVATION (MSL)					
II. GENERAL										
8. TYPE FACILITY		9. FREQ / CHANNEL		10. IDENTIFICATION		11. CLASS / CATEGORY		12. COMMON SYSTEM <input type="checkbox"/> YES <input type="checkbox"/> NO		
14. EQUIPMENT TYPE		15. TYPE ANTENNA		16. ANTENNA ELEV. - MSL		17. ANTENNA HEIGHT-FT		18. CONTROL STATION AND FREQUENCY		
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: _____ LONGITUDE: _____			20. PRIMARY POWER <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input type="checkbox"/> YES <input type="checkbox"/> NO		23. MONITOR <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> SINGLE <input type="checkbox"/> DUAL	
24. RUNWAY NUMBER		25. RUNWAY TRUE		26. MAG VARIATION / YEAR MAG VAR: EPOCH YR:		27. VOICE		28. AFIS RADIAL		
30. RUNWAY DIMENSIONS LENGTH: _____ FT WIDTH: _____ FT LANDING LENGTH: _____ FT			31. DISPLACED TH <input type="checkbox"/> YES <input type="checkbox"/> NO DISPLACED: _____ FT		32. COMMISSIONED WIDTH: _____ DEG ANGLE: _____ DEG		33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: _____ DISTANCE: _____ ALTITUDE: _____			
34. THRESHOLD ELEV		35. TCH TCH: _____ FT AGL RDH: _____ FT AGL		36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees) _____ PAR (Degrees) _____ VGSI (Degrees) _____				37. RESTRICTED <input type="checkbox"/> YES <input type="checkbox"/> NO		
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH										
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____			39. DISTANCE TO OM (NM): _____ (FT): _____		40. DISTANCE TO MM (NM): _____ (FT): _____		41. DISTANCE TO IM (FT) (NM): _____ (FT): _____		42. DISTANCE IM TO TH (FT)	
43. DISTANCE TO TH		44. DIST TO STOP END		45. USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)			46. OFFSET LOC TRUE BEARING		47. LOC CW MONITOR WIDE: _____ NARROW: _____	
48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT): _____			49. BACK COURSE USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)			50. BC TRUE BEARING		51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT		
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L			53. FRONT COURSE CHECK POINT			54. BACK COURSE CHECK POINT				
IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION										
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____			56. DISTANCE TO OM (NM): _____ (FT): _____		57. DISTANCE TO MM (NM): _____ (FT): _____		58. DISTANCE TO IM (NM): _____ (FT): _____		59. DISTANCE TO PT "C" (NM): _____ (FT): _____	
60. DISTANCE TO TH (NM): _____ (FT): _____		61. RWY ELEV ABEAM GS ANTENNA		62. TDZE (MSL)		63. DISTANCE - THRESHOLD TO GPI (FT) ILS _____ PAR _____ VGSI _____ GPI: _____ RPI: _____ GPI: _____ RRP: _____				
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L				65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE _____ EC _____ MSL _____			66. ALTITUDE OVER MM (FT) TAPELINE _____ EC _____ MSL _____			
67. ALTITUDE OVER IM (FT) TAPELINE _____ MSL _____				68. DIST OM - TH (FT)		69. DIST MM - TH (FT)		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): _____ ANGLE (Low): _____		
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT				72. TYPE OF APPROACH LIGHTING			73. TYPE OF RUNWAY LIGHTING			

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 1. FAA FORM 8240-22, CONTINUED

PAGE 2 of 2 PAGES

V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL		AZIMUTH / CHECK POINT DESCRIPTION		75. THEODOLITE POSITION	
76. GROUND RECEIVER CHECK POINTS				77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION	
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
REGION:		FIO:		FACILITY IDENT:	
FACILITY TYPE:					
DATE PREPARED:		TYPED NAME:		SIGNATURE:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 2. SAMPLE FAA FORM 8240-22, VORTAC

FACILITY DATA									
I. AIRPORT / FACILITY									
1. LOCATION PUEBLO, CO			2. ICAO IDENT		3. MAG VAR / YR MAG VAR: EPOCH YR:		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: _____ LONGITUDE: _____		
5. AIRPORT / FACILITY NAME PUEBLO			6. OWNER FAA		7. FIELD ELEVATION (MSL)				
II. GENERAL									
8. TYPE FACILITY VORTAC		9. FREQ / CHANNEL 116.7/114X		10. IDENTIFICATION PUB		11. CLASS / CATEGORY H		12. COMMON SYSTEM <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
13. COMMISSIONED DATE VOR 8/8/58 TAC 4/5/60									
14. EQUIPMENT TYPE VOR 2ND GEN TAC GRN-9B		15. TYPE ANTENNA VOR T20-1 TAC RTA-2		16. ANTENNA ELEV. - MSL VOR 4760.0 TAC 4760.0		17. ANTENNA HEIGHT-FT		18. CONTROL STATION AND FREQUENCY DEN FSS	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: N38-17-39.30 LONGITUDE: W104-25-44-10		20. PRIMARY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. TAC VOR <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO		23. MONITOR <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> SINGLE <input checked="" type="checkbox"/> DUAL	
24. RUNWAY NUMBER		25. RUNWAY TRUE		26. MAG VARIATION / YEAR MAG VAR: E13 EPOCH YR: 1965		27. VOICE NONE		28. AFIS RADIAL 64	
29. POWER OUTPUT VOR 125 W TAC 5 KW									
30. RUNWAY DIMENSIONS LENGTH: _____ FT WIDTH: _____ FT LANDING LENGTH: _____ FT		31. DISPLACED TH <input type="checkbox"/> YES <input type="checkbox"/> NO DISPLACED: _____ FT		32. COMMISSIONED WIDTH: _____ DEG ANGLE: _____ DEG		33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: _____ DISTANCE: _____ ALTITUDE: _____			
34. THRESHOLD ELEV		35. TCH TCH: _____ FT AGL RDH: _____ FT AGL		36. ILS/MLS / PAR / VGSi ANGLE COINCIDENCE ILS/MLS (Degrees) _____ PAR (Degrees) _____ VGSi (Degrees) _____		37. RESTRICTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH									
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____		39. DISTANCE TO OM (NM): _____ (FT): _____		40. DISTANCE TO MM (NM): _____ (FT): _____		41. DISTANCE TO IM (FT) (NM): _____ (FT): _____		42. DISTANCE IM TO TH (FT)	
43. DISTANCE TO TH		44. DIST TO STOP END		45. USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING		47. LOC CW MONITOR WIDE: _____ NARROW: _____	
48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT): _____		49. BACK COURSE USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)		50. BC TRUE BEARING		51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT			
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT					
IV. GLIDE PATH DATA (ILS, PAR, VGSi) or MLS ELEVATION									
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____		56. DISTANCE TO OM (NM): _____ (FT): _____		57. DISTANCE TO MM (NM): _____ (FT): _____		58. DISTANCE TO IM (NM): _____ (FT): _____		59. DISTANCE TO PT "C" (NM): _____ (FT): _____	
60. DISTANCE TO TH (NM): _____ (FT): _____		61. RWY ELEV ABEAM GS ANTENNA		62. TDZE (MSL)		63. DISTANCE - THRESHOLD TO GPI (FT) ILS: _____ PAR: _____ VGSi: _____ GPI: _____ RPI: _____			
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE _____ EC _____ MSL _____		66. ALTITUDE OVER MM (FT) TAPELINE _____ EC _____ MSL _____					
67. ALTITUDE OVER IM (FT) TAPELINE _____ MSL _____		68. DIST OM - TH (FT)		69. DIST MM - TH (FT)		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): _____ ANGLE (Low): _____			
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING:		73. TYPE OF RUNWAY LIGHTING:					

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 2. SAMPLE FAA FORM 8240-22, VORTAC (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL 267		AZIMUTH / CHECK POINT DESCRIPTION 267.5/19.5NM/73000'/INTBR OVER N STREAM AFIS: 64/20-15NM/12500'		75. THEODOLITE POSITION N/A	
76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS		
RADIAL	DISTANCE	DESCRIPTION		BEARING	DESCRIPTION
249	4.0	CIR ON PAD S. SIDE AER 08L PUEBLO MEMORIAL, CO			
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
	294	7.8	7300	OVER KOAA TOWER 5.4 NM NW AIRPORT	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <input type="checkbox"/> YES <input type="checkbox"/> NO		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
ESV VOR AND TAC: 351R/59 NM/9400' (2/3/89) SIAP: PUEBLO MEMORIAL, CO VOR OR TAC RWY 26R AMDT 26 PUBL HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88					
REGION: ANM		FIO: SAC		FACILITY IDENT: PUB	
				FACILITY TYPE: VORTAC	
DATE PREPARED:		TYPED NAME:		SIGNATURE:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA

FIGURE 3. SAMPLE FAA FORM 8240-22, ILS/DME

PAGE 1 of 2 PAGES

FACILITY DATA									
I. AIRPORT / FACILITY									
1. LOCATION OKLAHOMA CITY, OK		2. ICAO IDENT KOKC		3. MAG VAR / YR MAG VAR: E7 EPOCH YR: 1985		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: N35-23-34.90 LONGITUDE: W097-36-01.50			
5. AIRPORT / FACILITY NAME WILL ROGERS WORLD		6. OWNER FAA		7. FIELD ELEVATION (MSL) 1295					
II. GENERAL									
8. TYPE FACILITY ILS/DME		9. FREQ / CHANNEL LOC 110.90/46X GP 330.80		10. IDENTIFICATION RGR		11. CLASS / CATEGORY 2		12. COMMON SYSTEM <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
13. COMMISSIONED DATE LOC 11/4/88 GP 11/3/88 DME 2/11/80		14. EQUIPMENT TYPE LOC WL GP WL		15. TYPE ANTENNA LOC LP GP NR		16. ANTENNA ELEV. - MSL LOC 1287.0 GP 1281.0		17. ANTENNA HEIGHT-FT	
18. CONTROL STATION AND FREQUENCY WILL ROGERS TOWER 118.3/257.8		19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: _____ LONGITUDE: _____		20. PRIMARY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input type="checkbox"/> COMMERCIAL <input checked="" type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
23. MONITOR <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> SINGLE <input checked="" type="checkbox"/> DUAL		24. RUNWAY NUMBER 35R		25. RUNWAY TRUE 359.96		26. MAG VARIATION / YEAR MAG VAR: E7 EPOCH YR: 1985		27. VOICE NONE	
28. AFIS RADIAL		29. POWER OUTPUT		30. RUNWAY DIMENSIONS LENGTH: 9802 FT WIDTH: 150 FT LANDING LENGTH: 9802 FT		31. DISPLACED TH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO DISPLACED: _____ FT		32. COMMISSIONED WIDTH: 3.65 DEG ANGLE: 2.90 DEG	
33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: _____ DISTANCE: _____		34. THRESHOLD ELEV 1282.8		35. TCH TCH: _____ FT AGL RDH: 58.0 FT AGL		36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees) 2.90 PAR (Degrees) VGSI (Degrees)		37. RESTRICTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH									
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: N35-24-29.92 LONGITUDE: W097-35-19.06		39. DISTANCE TO OM (NM): 6.79 (FT): 41245		40. DISTANCE TO MM (NM): 2.30 (FT): 13966		41. DISTANCE TO IM (FT) (NM): 1.98 (FT): 12004		42. DISTANCE IM TO TH (FT) 1033	
43. DISTANCE TO TH 10971		44. DIST TO STOP END 1169		45. USABLE DISTANCE 18 NM AT 5787 FT (MSL / MAA) NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING		47. LOC CW MONITOR WIDE: 4.27 NARROW: 3.03	
48. LOCALIZER COURSE TAILORED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT): 699.14		49. BACK COURSE USABLE DISTANCE N/A NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		50. BC TRUE BEARING 179.96		51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT-FT 9883			
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L C/L		53. FRONT COURSE CHECK POINT LOM 6.8 DME		54. BACK COURSE CHECK POINT N/A					
IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION									
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: N35-22-52.18 LONGITUDE: W097-35-14.15		56. DISTANCE TO OM (NM): 5.16 (FT): 31362		57. DISTANCE TO MM (NM): .67 (FT): 4083		58. DISTANCE TO IM (NM): .35 (FT): 2121		59. DISTANCE TO PT "C" (NM): _____ (FT): _____	
60. DISTANCE TO TH (NM): .18 (FT): 1088		61. RWY ELEV ABEAM GS ANTENNA 1286.1		62. TDZE (MSL) 1294		63. DISTANCE - THRESHOLD TO GPI (FT) ILS GPI: 1153.14 RRP: 1088.00		PAR GPI: _____ RRP: _____	
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L RIGHT 400		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE 1588.73 EC MSL 2898.35		66. ALTITUDE OVER MM (FT) TAPELINE 206.84 EC MSL 1493.33					
67. ALTITUDE OVER IM (FT) TAPELINE 107.45 MSL 1393.55		68. DIST OM - TH (FT) 30274		69. DIST MM - TH (FT) 2995		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): 3.12 ANGLE (Low): 2.68			
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT 1286.1		72. TYPE OF APPROACH LIGHTING: ALSF-2		73. TYPE OF RUNWAY LIGHTING: HIRL/TDZ/CL					

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 3. SAMPLE FAA FORM 8240-22, ILS/DME (Continued)

PAGE 2 of 2 PAGES

V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL			AZIMUTH / CHECK POINT DESCRIPTION		75. THEODOLITE POSITION
76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS		
RADIAL	DISTANCE	DESCRIPTION		BEARING	DESCRIPTION
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <input type="checkbox"/> YES <input type="checkbox"/> NO		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
COMMISSIONED IAW 8240.47/REF ELEV = 1286' BLOCK 61 USED TO COMPUTE GPI, RPI, POINT C.					
OM N35-17-42.00 W097-35-18.10 ELEV 1198.0' GALLY LOM 350 KHZ					
MM N35-22-11.80 W097-35-18.90 ELEV 1263.0'					
IM N35-22-31.20 W097-35-19.00 ELEV 1271.3'					
AER N35-22-41.42 W097-35-18.97					
SER N35-24-18.35 W097-35-19.06 ELEV 1286.4'					
RUNWAY C/L ABEAM GP ANTENNA N35-22-52.18 W097-35-18.98					
DME N35-24-30.73 W097-35-21.81 ELEV 1304.0'					
LOC/CLR CHECKS AT LCA (2902' MSL) DUAL FREQUENCY LOCALIZER					
SIAP: WILL ROGERS WORLD, OK ILS RWY 35R AMDT 7 PUBL WILL ROGERS WORLD, OK ILS RWY 35R (CAT 2) AMDT 7 PUBL					
HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88					
REGION: ASW		FIO: OKC		FACILITY IDENT: RGR	
DATE PREPARED:		TYPED NAME:		FACILITY TYPE: ILS/DME	
				SIGNATURE:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 4. SAMPLE FAA FORM 8240-22, PAR

FACILITY DATA									
I. AIRPORT / FACILITY									
1. LOCATION PANAMA CITY, FL				2. ICAO IDENT KPAM		3. MAG VAR / YR MAG VAR: E 0 EPOCH YR: 1985		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: N30-04-11.38 LONGITUDE: W085-34-34.29	
5. AIRPORT / FACILITY NAME TYNDALL AFB				6. OWNER USAF		7. FIELD ELEVATION (MSL) 18			
II. GENERAL									
8. TYPE FACILITY PAR		9. FREQ / CHANNEL		10. IDENTIFICATION PAM		11. CLASS / CATEGORY		12. COMMON SYSTEM <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
13. COMMISSIONED DATE 5/3/89		14. EQUIPMENT TYPE FPN-62A SN 118		15. TYPE ANTENNA PHASED ARRAY		16. ANTENNA ELEV. - MSL 14.0		17. ANTENNA HEIGHT-FT	
18. CONTROL STATION AND FREQUENCY TYNDALL APPROACH CONTROL 119.75//373.0/124.15/294.5		19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: N30-04-08.98 LONGITUDE: W085-34-26.81		20. PRIMARY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
23. MONITOR <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> SINGLE <input type="checkbox"/> DUAL		24. RUNWAY NUMBER 31R		25. RUNWAY TRUE 314.48		26. MAG VARIATION / YEAR MAG VAR: EPOCH YR:		27. VOICE	
28. AFIS RADIAL		29. POWER OUTPUT		30. RUNWAY DIMENSIONS LENGTH: 1003 FT WIDTH: 200 FT LANDING LENGTH: 1003 FT		31. DISPLACED TH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO DISPLACED: FT		32. COMMISSIONED WIDTH: DEG ANGLE: 2.50 DEG	
33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: DISTANCE: ALTITUDE:		34. THRESHOLD ELEV 16.0		35. TCH TCH: 49.72 FT AGL RDH: FT AGL		36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees) 2.50 PAR (Degrees) 2.50 VGSI (Degrees) PAPI 2.50		37. RESTRICTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH									
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: LONGITUDE:				39. DISTANCE TO OM (NM): (FT):		40. DISTANCE TO MM (NM): (FT):		41. DISTANCE TO IM (FT) (NM): (FT):	
42. DISTANCE IM TO TH (FT)		43. DISTANCE TO TH		44. DIST TO STOP END		45. USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING	
47. LOC CW MONITOR WIDE: NARROW:		48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		50. BC TRUE BEARING		51. DISTANCE TO CL RWY ABEAM GLIDE PATH ANT- FT	
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L				53. FRONT COURSE CHECK POINT				54. BACK COURSE CHECK POINT	
IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION									
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: LONGITUDE:				56. DISTANCE TO OM (NM): (FT):		57. DISTANCE TO MM (NM): (FT):		58. DISTANCE TO IM (NM): (FT):	
59. DISTANCE TO PT "C"		60. DISTANCE TO TH (NM): (FT):		61. RWY ELEV ABEAM GS ANTENNA		62. TDZE (MSL) 16.0		63. DISTANCE - THRESHOLD TO GPI (FT) ILS PAR VGSI GPI: 1138.78 GPI: RRP:	
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L LEFT 473				65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE EC MSL		66. ALTITUDE OVER MM (FT) TAPELINE EC MSL		67. ALTITUDE OVER IM (FT) TAPELINE MSL	
68. DIST OM - TH (FT)		69. DIST MM - TH (FT)		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): ANGLE (Low):		71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING: ALSF-1	
73. TYPE OF RUNWAY LIGHTING: HIRL/PAPI									

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 4. SAMPLE FAA FORM 8240-22, PAR (Continued)

PAGE 2 of 2 PAGES

V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL			AZIMUTH / CHECK POINT DESCRIPTION		75. THEODOLITE POSITION
76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS		
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION	
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <input type="checkbox"/> YES <input type="checkbox"/> NO		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
AER N30-03-38.05 W085-33-42.91 SER N30-04-47.42 W085-35-04.14 ELEV 15.7' GPI N30-03-45.95 W085-33-52.16 HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88					
REGION: ASO (ICD)		FIO: ATL		FACILITY IDENT: PAM	
DATE PREPARED:		TYPED NAME		SIGNATURE:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 5. SAMPLE FAA FORM 8420-22, NDB

FACILITY DATA									
I. AIRPORT / FACILITY									
1. LOCATION ALEXANDRIA, MN				2. ICAO IDENT		3. MAG VAR / YR MAG VAR: EPOCH YR:		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: _____ LONGITUDE: _____	
5. AIRPORT / FACILITY NAME ANDRI				6. OWNER STATE OF MN		7. FIELD ELEVATION (MSL)			
II. GENERAL									
8. TYPE FACILITY NDB		9. FREQ / CHANNEL 281		10. IDENTIFICATION AJW		11. CLASS / CATEGORY MHW		12. COMMON SYSTEM <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
13. COMMISSIONED DATE 4/6/81		14. EQUIPMENT TYPE AERO COM		15. TYPE ANTENNA		16. ANTENNA ELEV. - MSL 1404.0		17. ANTENNA HEIGHT-FT	
18. CONTROL STATION AND FREQUENCY PNM FSS		19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: N45-47-30.00 LONGITUDE: W095-18-19.00		20. PRIMARY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input checked="" type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
23. MONITOR <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> SINGLE <input type="checkbox"/> DUAL		24. RUNWAY NUMBER		25. RUNWAY TRUE		26. MAG VARIATION / YEAR MAG VAR: E 5 EPOCH YR: 1985		27. VOICE NONE	
28. AFIS RADIAL		29. POWER OUTPUT 25 W		30. RUNWAY DIMENSIONS LENGTH: _____ FT WIDTH: _____ FT LANDING LENGTH: _____ FT		31. DISPLACED TH <input type="checkbox"/> YES <input type="checkbox"/> NO DISPLACED: _____ FT		32. COMMISSIONED WIDTH: _____ DEG ANGLE: _____ DEG	
33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: _____ DISTANCE: _____ ALTITUDE: _____		34. THRESHOLD ELEV		35. TCH TCH: _____ FT AGL RDH: _____ FT AGL		36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees) _____ PAR (Degrees) _____ VGSI (Degrees) _____		37. RESTRICTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH									
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____		39. DISTANCE TO OM (NM): _____ (FT): _____		40. DISTANCE TO MM (NM): _____ (FT): _____		41. DISTANCE TO IM (FT) (NM): _____ (FT): _____		42. DISTANCE IM TO TH (FT) (NM): _____ (FT): _____	
43. DISTANCE TO TH		44. DIST TO STOP END		45. USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING		47. LOC CW MONITOR WIDE: _____ NARROW: _____	
48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT): _____		49. BACK COURSE USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)		50. BC TRUE BEARING		51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT			
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT					
IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION									
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____		56. DISTANCE TO OM (NM): _____ (FT): _____		57. DISTANCE TO MM (NM): _____ (FT): _____		58. DISTANCE TO IM (NM): _____ (FT): _____		59. DISTANCE TO PT "C" (NM): _____ (FT): _____	
60. DISTANCE TO TH (NM): _____ (FT): _____		61. RWY ELEV ABEAM GS ANTENNA		62. TDZE (MSL)		63. DISTANCE - THRESHOLD TO GPI (FT) ILS: _____ PAR: _____ VGSI: _____ GPI: _____ RPI: _____ GPI: _____ RRP: _____			
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE _____ EC _____ MSL _____		66. ALTITUDE OVER MM (FT) TAPELINE _____ EC _____ MSL _____		67. ALTITUDE OVER IM (FT) TAPELINE _____ MSL _____			
68. DIST OM - TH (FT)		69. DIST MM - TH (FT)		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): _____ ANGLE (Low): _____					
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING		73. TYPE OF RUNWAY LIGHTING					

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 5. SAMPLE FAA FORM 8240-22, NDB (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL		AZIMUTH / CHECK POINT DESCRIPTION		75. THEODOLITE POSITION	
76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS		
RADIAL	DISTANCE	DESCRIPTION		BEARING	DESCRIPTION
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <input type="checkbox"/> YES <input type="checkbox"/> NO		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
SIAP: CHANDLER FIELD, MN NDB RWY 31 AMDT 3 PUBL HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88					
REGION: AGL		FIO: BTL		FACILITY IDENT: AJW	
DATE PREPARED:		TYPED NAME:		SIGNATURE:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 6. SAMPLE FAA FORM 8240-22, ASR/SECRA

FACILITY DATA									
I. AIRPORT / FACILITY									
1. LOCATION PANAMA CITY, FL				2. ICAO IDENT KPAM		3. MAG VAR / YR MAG VAR: E 0 EPOCH YR: 1985		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: N30-04-11.38 LONGITUDE: W085-34-34.29	
5. AIRPORT / FACILITY NAME TYNDALL AFB			6. OWNER USAF		7. FIELD ELEVATION (MSL) 18				
II. GENERAL									
8. TYPE FACILITY ASR/SECRA		9. FREQ / CHANNEL		10. IDENTIFICATION PAM		11. CLASS / CATEGORY		12. COMMON SYSTEM <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
13. COMMISSIONED DATE ASR 8/23/82 SECRA 8/23/82		14. EQUIPMENT TYPE GPN-20 SN 40		15. TYPE ANTENNA		16. ANTENNA ELEV. - MSL 7.5		17. ANTENNA HEIGHT-FT	
18. CONTROL STATION AND FREQUENCY TYNDALL APPROACH CONTROL 119.75/373.0/124.15/294.5		19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: N30-04-06.14 LONGITUDE: W085-33-35.42		20. PRIMARY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
23. MONITOR <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> SINGLE <input type="checkbox"/> DUAL		24. RUNWAY NUMBER		25. RUNWAY TRUE		26. MAG VARIATION / YEAR MAG VAR: E 0 EPOCH YR: 1985		27. VOICE	
28. AFIS RADIAL		29. POWER OUTPUT ASR 56 DBM SECRA 300W		30. RUNWAY DIMENSIONS LENGTH: FT WIDTH: FT LANDING LENGTH: FT		31. DISPLACED TH <input type="checkbox"/> YES <input type="checkbox"/> NO DISPLACED: FT		32. COMMISSIONED WIDTH: DEG ANGLE: DEG	
33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: 70 DISTANCE: 54 ALTITUDE: 23000		34. THRESHOLD ELEV		35. TCH TCH: FT AGL RDH: FT AGL		36. ILS/MLS / PAR / VGSi ANGLE COINCIDENCE ILS/MLS (Degrees) PAR (Degrees) VGSi (Degrees)		37. RESTRICTED <input type="checkbox"/> YES <input type="checkbox"/> NO	
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH									
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: LONGITUDE:		39. DISTANCE TO OM (NM): (FT):		40. DISTANCE TO MM (NM): (FT):		41. DISTANCE TO IM (FT) (NM): (FT):		42. DISTANCE IM TO TH (FT)	
43. DISTANCE TO TH		44. DIST TO STOP END		45. USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING		47. LOC CW MONITOR WIDE: NARROW:	
48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		50. BC TRUE BEARING		51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT			
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT					
IV. GLIDE PATH DATA (ILS, PAR, VGSi) or MLS ELEVATION									
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: LONGITUDE:		56. DISTANCE TO OM (NM): (FT):		57. DISTANCE TO MM (NM): (FT):		58. DISTANCE TO IM (NM): (FT):		59. DISTANCE TO PT "C" (NM): (FT):	
60. DISTANCE TO TH (NM): (FT):		61. RWY ELEV ABEAM GS ANTENNA		62. TDZE (MSL)		63. DISTANCE - THRESHOLD TO GPI (FT) ILS PAR VGSi GPI: RPI: GPI: RRP:			
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE EC MSL		66. ALTITUDE OVER MM (FT) TAPELINE EC MSL		67. ALTITUDE OVER IM (FT) TAPELINE MSL			
68. DIST OM - TH (FT)		69. DIST MM - TH (FT)		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): ANGLE (Low):					
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING		73. TYPE OF RUNWAY LIGHTING					

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INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 7. SAMPLE FAA FORM 8240-22, VASI

FACILITY DATA									
I. AIRPORT / FACILITY									
1. LOCATION SPOKANE, WA			2. ICAO IDENT KSKA		3. MAG VAR / YR MAG VAR: E 19 EPOCH YR: 1985		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: N47-36-54.59 LONGITUDE: W117-39-17.06		
5. AIRPORT / FACILITY NAME FAIRCHILD AFB			6. OWNER USAF		7. FIELD ELEVATION (MSL) 2462				
II. GENERAL									
8. TYPE FACILITY VASI		9. FREQ / CHANNEL		10. IDENTIFICATION SKA		11. CLASS / CATEGORY		12. COMMON SYSTEM <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
13. COMMISSIONED DATE 1974 SEE REMARKS									
14. EQUIPMENT TYPE VASI-12 2 BAR		15. TYPE ANTENNA		16. ANTENNA ELEV. - MSL		17. ANTENNA HEIGHT-FT		18. CONTROL STATION AND FREQUENCY	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: _____ LONGITUDE: _____				20. PRIMARY POWER <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input type="checkbox"/> YES <input type="checkbox"/> NO	
23. MONITOR <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> SINGLE <input type="checkbox"/> DUAL									
24. RUNWAY NUMBER 23		25. RUNWAY TRUE 246.75		26. MAG VARIATION / YEAR MAG VAR: EPOCH YR:		27. VOICE		28. AFIS RADIAL	
29. POWER OUTPUT									
30. RUNWAY DIMENSIONS LENGTH: 13901 FT WIDTH: 300 FT LANDING LENGTH: 13901 FT				31. DISPLACED TH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO DISPLACED: _____ FT		32. COMMISSIONED WIDTH: _____ DEG ANGLE: 2.50 DEG		33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: _____ DISTANCE: _____ ALTITUDE: _____	
34. THRESHOLD ELEV 2414.5		35. TCH TCH: 49.11 FT AGL RDH: _____ FT AGL		36. ILS/MLS / PAR / VGSi ANGLE COINCIDENCE ILS/MLS (Degrees) 2.50 PAR (Degrees) 2.50 VGSi (Degrees) 2.50				37. RESTRICTED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH									
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____				39. DISTANCE TO OM (NM): _____ (FT): _____		40. DISTANCE TO MM (NM): _____ (FT): _____		41. DISTANCE TO IM (FT) (NM): _____ (FT): _____	
42. DISTANCE IM TO TH (FT)				43. DISTANCE TO TH		44. DIST TO STOP END		45. USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)	
46. OFFSET LOC TRUE BEARING				47. LOC CW MONITOR WIDE: _____ NARROW: _____		48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT): _____		49. BACK COURSE USABLE DISTANCE NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)	
50. BC TRUE BEARING				51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT		52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L			
53. FRONT COURSE CHECK POINT				54. BACK COURSE CHECK POINT					
IV. GLIDE PATH DATA (ILS, PAR, VGSi) or MLS ELEVATION									
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: _____ LONGITUDE: _____				56. DISTANCE TO OM (NM): _____ (FT): _____		57. DISTANCE TO MM (NM): _____ (FT): _____		58. DISTANCE TO IM (NM): _____ (FT): _____	
59. DISTANCE TO PT "C" (NM): _____ (FT): _____				60. DISTANCE TO TH (NM): .17 (FT): 1063		61. RWY ELEV ABEAM GS ANTENNA RRP 2417.2		62. TDZE (MSL) 2423	
63. DISTANCE - THRESHOLD TO GPI (FT) ILS: _____ PAR: _____ VGSi: _____ GPI: _____ GPI: _____ GPI: 1124.84 RPI: _____ RRP: 1063.00				64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE _____ EC _____ MSL _____		66. ALTITUDE OVER MM (FT) TAPELINE _____ EC _____ MSL _____	
67. ALTITUDE OVER IM (FT) TAPELINE _____ MSL _____				68. DIST OM - TH (FT)		69. DIST MM - TH (FT)		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): _____ ANGLE (Low): _____	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT				72. TYPE OF APPROACH LIGHTING ALSF-1/VASI		73. TYPE OF RUNWAY LIGHTING HIRL			

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INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 7. SAMPLE FAA FORM 8240-22, VASI (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL		AZIMUTH / CHECK POINT DESCRIPTION		75. THEODOLITE POSITION	
76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS		
RADIAL	DISTANCE	DESCRIPTION		BEARING	DESCRIPTION
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <input type="checkbox"/> YES <input type="checkbox"/> NO		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
AER N47-37-21.71 W117-37-43.82					
SER N47-36-27.51 W117-40-50.20 ELEV 2461.9'					
RRP N47-37-17.57 W117-37-58.08					
BCE ADVISES SYSTEM INSTALLED IN 1974: COMMISSIONING DATE UNKNOWN.					
		DOWNWIND BAR	UPWIND BAR		
DISTANCE TO THRESHOLD		775'	1350'		
AIMING ANGLE		2.00	2.50		
RUNWAY CROWN ELEVATION		2416.5'	2418.2'		
HORIZONTAL DATUM: NAD 83		VERTICAL DATUM: NAVD 88			
REGION: ANM (SCD)		FIO: SAC		FACILITY IDENT: SKA	
FACILITY TYPE: VASI (23)					
DATE PREPARED:		TYPED NAME:		SIGNATURE:	

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INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 8. SAMPLE FAA FORM 8240-22, MLS/DME

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FACILITY DATA										
I. AIRPORT / FACILITY										
1. LOCATION WICHITA, KS			2. ICAO IDENT KICT		3. MAG VAR / YR MAG VAR: E 7 EPOCH YR: 1985		4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: N37-38-59.80 LONGITUDE: W097-25-57.80			
5. AIRPORT / FACILITY NAME WICHITA MID-CONTINENT			6. OWNER FAA		7. FIELD ELEVATION (MSL) 1332.0					
II. GENERAL										
8. TYPE FACILITY MLS/DME		9. FREQ / CHANNEL AS 556 EL 556 DME 25Y		10. IDENTIFICATION JOZ*		11. CLASS / CATEGORY 1		12. COMMON SYSTEM <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
14. EQUIPMENT TYPE AS WL EL WL		15. TYPE ANTENNA AS TYPE 6/60 EL TYPE 6		16. ANTENNA ELEV. - MSL AZ 1319.0 EL 1316.5		17. ANTENNA HEIGHT-FT		18. CONTROL STATION AND FREQUENCY ICT ATCT 118.2/257.8		
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: _____ LONGITUDE: _____		20. PRIMARY POWER <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE		21. STANDBY POWER <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ENGINE <input checked="" type="checkbox"/> BATTERY <input type="checkbox"/> NONE		22. STANDBY EQUIP. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		23. MONITOR <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> SINGLE <input type="checkbox"/> DUAL		
24. RUNWAY NUMBER 19L		25. RUNWAY TRUE 200.01		26. MAG VARIATION / YEAR MAG VAR: E 7 EPOCH YR: 1985		27. VOICE NONE		28. AFIS RADIAL		
30. RUNWAY DIMENSIONS LENGTH: 7302 FT WIDTH: 150 FT LANDING LENGTH: 7302 FT		31. DISPLACED TH <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO DISPLACED: _____ FT		32. COMMISSIONED WIDTH: _____ DEG ANGLE: 3.00 DEG		33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: _____ DISTANCE: _____ ALTITUDE: _____				
34. THRESHOLD ELEV 1318.9		35. TCH TCH: 44.0 FT AGL RDH: _____ FT AGL		36. ILS/MLS / PAR / VGSi ANGLE COINCIDENCE ILS/MLS (Degrees) 3.00 PAR (Degrees) _____ VGSi (Degrees) 3.00		37. RESTRICTED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				
III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH										
38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: N37-38-23.05 LONGITUDE: W097-25-38.42			39. DISTANCE TO OM (NM): 7.10 FAF (FT): 43159		40. DISTANCE TO MM (NM): N/A (FT): _____		41. DISTANCE TO IM (FT) N/A		42. DISTANCE IM TO TH (FT) N/A	
43. DISTANCE TO TH 8471		44. DIST TO STOP END 1169		45. USABLE DISTANCE 20 NM AT 21319 FT (MSL / MAA) NM AT _____ FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING		47. LOC CW MONITOR WIDE: _____ NARROW: _____		
48. LOCALIZER COURSE TAILORED <input type="checkbox"/> YES <input type="checkbox"/> NO WIDTH AT TH (FT): N/A		49. BACK COURSE USABLE DISTANCE N/A NM AT _____ FT (MSL / MAA) NM AT _____ FT (MSL / MRA)		50. BC TRUE BEARING 20.01		51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT. FT 7585				
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L C/L			53. FRONT COURSE CHECK POINT KECHI INT RADAR 7.1 DME			54. BACK COURSE CHECK POINT N/A				
IV. GLIDE PATH DATA (ILS, PAR, VGSi) or MLS ELEVATION										
55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: N37-39-32.16 LONGITUDE: W097-25-01.49			56. DISTANCE TO OM (NM): 5.85 FAF (FT): 35574		57. DISTANCE TO MM (NM): N/A (FT): _____		58. DISTANCE TO IM (NM): N/A (FT): _____		59. DISTANCE TO PT "C" (NM): _____ (FT): _____	
60. DISTANCE TO TH (NM): .15 (FT): 886		61. RWY ELEV ABEAM GS ANTENNA 1318.9		62. TDZE (MSL) 1319.0		63. DISTANCE - THRESHOLD TO GPI (FT) ILS: _____ PAR: _____ VGSi: _____ GPI: 840.21 GPI: _____ GPI: _____ RRP: 840.21 RRP: _____ RRP: _____				
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L LEFT 399			65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE 1864.35 EC _____ MSL 3211.12		66. ALTITUDE OVER MM (FT) TAPELINE N/A EC _____ MSL _____		70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): 3.23 ANGLE (Low): 2.78			
67. ALTITUDE OVER IM (FT) TAPELINE N/A MSL _____			68. DIST OM - TH (FT) 34688 FAF		69. DIST MM - TH (FT) N/A		73. TYPE OF RUNWAY LIGHTING REIL HIRL			
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT 1316.5			72. TYPE OF APPROACH LIGHTING VASI-4L							

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INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 8. SAMPLE FAA FORM 8240-22, MLS/DME (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME					
74. REFERENCE RADIAL			AZIMUTH / CHECK POINT DESCRIPTION		75. THEODOLITE POSITION
76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS		
RADIAL	DISTANCE	DESCRIPTION		BEARING	DESCRIPTION
78. AIRBORNE RECEIVER CHECKPOINTS					
NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION	
VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)					
79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING <input type="checkbox"/> YES <input type="checkbox"/> NO		82. ANTENNA TILT (Degrees) FIXED: VAR:	
83. NON-PRECISION APPROACHES					
AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
84. REMARKS (Include all facility or airspace restrictions)					
<p>*BLOCK 10. AMIS IDENT IS JOZM.</p> <p>BLOCK 37. ELEV UNUSABLE CCW BEYOND 153 DEGREES (9/8/89)..</p> <p>AZ BEAM WIDTH 1 DEGREE ELEV BEAM WIDTH 1 DEGREE</p> <p>AER N37-39-41.74 W097-25-02.38</p> <p>SER N37-38-33.91 W097-25-33.45 ELEV 1319.8'</p> <p>DME N37-38-22.37 W097-25-36.08 ELEV 1331.0'</p> <p>RUNWAY C/L ABEAM EL ANTENNA N37-39-33.51 W097-25-06.15</p> <p>BLOCK 16 USED TO COMPUTE TCH, GPI, RPI, POINT C.</p> <p>SIAP: WICHITA MID-CONTINENT, KS MLS RWY 19L ORIG PUBL</p> <p>HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88</p>					
REGION: ACE		FIO: OKC		FACILITY IDENT: JOZ	
DATE PREPARED:		TYPED NAME:		FACILITY TYPE: MLS/DME	
				SIGNATURE:	

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**APPENDIX 23. DISTRIBUTION OF FLIGHT INSPECTION REPORTS
PERTAINING TO MILITARY FACILITIES**

1. The following list of **Army** addressees shall each be furnished one copy of flight inspection reports of U.S. Army facilities as follows:

a. Flight inspection reports relative to the contiguous United States, Latin America, Alaska, and Pacific Theatres (except Korea):

- (1) Local Air Traffic Control Facility Chief
- (2) Department of the Army
Aeronautical Services Agency
9325 Gunston Road
Building 1466, Suite N319
Fort Belvoir VA 22060-5582
- (3) ATTN ATZQ ATC OS
Commander USAAVNC
Fort Rucker AL 36362-5265

b. Flight inspection reports relative to the European Theatre:

- (1) Local Air Traffic Control Facility Chief
- (2) ATTN: ATAS-AD
CDR, USA Aeronautical Svcs Det Europe
Unit 29243
APO AE 09102
- (3) Department of the Army
Aeronautical Services Agency
9325 Gunston Road
Building 1466, Suite N319
Fort Belvoir VA 22060-5582
- (4) ATTN ATZQ ATC OS
Commander USAAVNC
Fort Rucker AL 36362-5265
- (5) Commander
3/58 Aviation
CMR 430
ATTN: AETV-ABS3-E
APO AE 09096

c. Flight inspection reports relative to the Korean Theatre:

- (1) Local Air Traffic Control Facility Chief
- (2) ATTN EACJ-EA-ATC
Commander EUSA
Unit 15236
APO AP 96205-0009
- (3) Department of the Army
Aeronautical Services Agency
9325 Gunston Road
Building 1466, Suite N319
Fort Belvoir VA 22060-5582
- (4) ATTN ATZQ ATC OS
Commander USAAVNC
Fort Rucker AL 36362-5265

d. The Flight Inspection Records Team, AVN-210A, shall furnish a copy of all contiguous United States and Korean Army facility flight inspection reports to:

ATTN ATZQ ATC OS
Commander USAAVNC
Fort Rucker AL 36362-5265

2. The following list of Navy addressees shall be furnished copies of flight inspection reports of Navy and Marine Corps facilities:

a. One copy of each flight inspection report of all Navy and Marine Corps facilities (worldwide) shall be sent to:

- (1) Velez Commander
Naval Air Systems Command
PMA213F
Villa Road, Bldg 8251, Unit 11
Saint Inigoes MD 20684
- (2) NCCOSC RDTE DIV 334
53560 Hull Street
San Diego CA 92152-5001
- (3) Head, Naval Flight Information Group
1339 Patterson Ave, SE
Room 301
Washington Navy Yard DC 20374-5088

b. In addition to the distribution specified in Paragraph 2a, one copy of each flight inspection report for Marine Corps facilities (worldwide) shall be sent to:

Commandant of the Marine Corps
Headquarters U.S. Marine Corps
APC-5
Washington DC 20380-1775

c. For shipboard TACANs, AVN-210A shall send one copy of the flight inspection report to the commands listed below; these commands shall make any required distribution to each ship:

(1) For east coast ships (other than aircraft carriers):

COMNAV AIRLANT

Attn: CODE: N37
1279 Franklin Street
Norfolk VA 23511-2494

(2) For east coast aircraft carriers:

Commander Naval Air Force (Code: 014)
U.S. Atlantic Fleet
Norfolk VA 23511-5188

(3) For west coast ships (other than aircraft carriers):

Commander Naval Surface Force
U.S. Pacific Fleet
2841 Rendova Road
San Diego CA 92155-5035

(4) For west coast aircraft carriers:

Commander Naval Air Force
U.S. Pacific Fleet N32
PO Box 357051
San Diego CA 92135-7051

3. The Flight Inspection Records Team, AVN-210A, shall furnish a copy of each flight inspection report of **USAF** navigational aids to the Major Command of the operating unit. AVN-210A will update unit mailing addresses with the respective Major Command on an annual basis. Major Commands will advise AVN-210A of address changes between updates as they occur.

